

AN AMERICAN WRITES ABOUT RUSSIA

"The Liquor Problem in Russia"

AND HERE IS WHAT A RUSSIAN THINKS ABOUT IT:

"Of late a great deal is written in America about Russia. The bloody war in which Russia is taking such a prominent part, has attracted interest to our country and has caused Americans to speak and write about her. Books and articles on Russia keep coming out. The writers, in the majority of cases, know Russia, are fairly well acquainted with the conditions there, but unfortunately they are not always able to place a proper valuation upon the course of events there, which ought to be viewed in the light of the peculiarly Russian historical experience. Mr. Johnson's book forms an exception in this respect, for the abundance and the interest of its material redeems the author's extreme optimism.

"From the point of view of facts, Mr. Johnson's book will undoubtedly take a high place in the ranks of the Anglo-American literature about Russia. The author makes a special study of the Russian liquor problem, and his study is fine, from the point of view of facts. Even in the Russian language there is scarcely such a comprehensive study of the history of the drink question in Russia. All who are interested in this question, which is such an unfortunate one for Russia, ought to read his book."—The Editor of the Ruskoye Slovo.

AND A GERMAN AGREES WITH THE RUSSIAN:

"I admire the carefulness with which you have gathered the material for it. It is a most interesting work. There is no doubt that the anti-alcohol movement in Russia and the measures taken are of extraordinary importance."

PROFESSOR J. GONSER, of Berlin,

Secretary Internationale Vereinigung gegen den Missbrauch geistiger Getraenke.

AND OVER IN SCOTLAND THEY APPRECIATE IT TOO:

"William E. Johnson has rendered many eminent services to the movement in many fields and many directions. We question if ever he did a better stroke of work than when he wrote and published the volume now before us. Everything worth knowing about the notorious state monopoly of vodka in Russia, what led to its adoption and to its Prohibition, is here recorded in such as he who runs may read. Under such headings as the Romance of the Russian People, Political Organization of the Empire, The Rise and Fall of Serfdom, etc., the reader will find a wonderful wealth of information and a narrative full of interest and instruction."—The International Good Templar, Glasgow, Scotland.

**A BOOK THAT HAS WON INTERNATIONAL COMMENDATION IS WORTH
YOUR WHILE**

"The Liquor Problem in Russia"

By **WILLIAM E. JOHNSON**

Editor of The New Republic, and former Chief Special Officer, U. S. Indian Service

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A Full Harvest

AT the present time, nineteen states have voted to prohibit the liquor traffic. There is good prospect that at the approaching election several states will be added to this number.

What of the future?

The future will only be made secure against alcohol invasion by continued education of public sentiment. This education will emphasize the necessity of persistent and courageous law enforcement. Still more fundamental will be thorough, systematic far reaching education in the facts about alcohol.

As long as any considerable amount of alcoholic drinks is consumed in a state, the state will not reap the full fruitage of improved health, sanity, morals and sobriety.

The number of permits for importing intoxicants for personal use in prohibition states, while representing a consumption far lower than that of open saloon days, shows that there is still a considerable number of persons who wish to continue their drinking. Such illegal sale as persists represents the same fact.

This calls for continued education of the public as to the dangers in the personal use of alcoholic beverages. The drinker in a prohibition state, even though he is not a party to any illegal sale, is a constant danger point in state welfare. His drinking may not only be a detriment to himself and through him to the state, but it continues the drinking example and custom in the environment of youth.

The boys and girls growing up in prohibition states need thorough training as to the dangers in alcoholic beverages to fortify them against the temptations they will meet in other environments from which alcohol has not been excluded.

The passage of a prohibition law does not, then, mark the end of temperance effort. It represents only one act in the long drama of ridding society of the burdens imposed by alcohol.

The men and women who have given money liberally to secure prohibition must continue to give liberally to make it secure by education.

The old leaders must organize new methods of education. They must have money to do it. Oratory will not do this work. It must be done by the patient, thorough massing of facts in a form to catch public attention. There must be exhibits, posters, training of teachers and public workers to conduct this education effectively, preparation of special material for the instruction of those who will come to us from foreign lands unprepared by knowledge or custom for prohibition here.

Unless all this is done, the states will not reap the complete harvest of prohibition. They may in time, even, be reduced to the precarious condition which, in some of the other prohibition states, nearly or quite lost them their prohibition laws. As long as alcoholic drinks are made and sold anywhere, no state is free from peril of alcoholic losses.

The passage of a prohibitory law, therefore, ought to mark acceleration of work of education in the facts about alcohol.

Every giver to temperance work in any state ought to specify that not less than ten per cent of his contribution should be set apart for this foundation teaching.

Every giver in a prohibition state after the passage of a prohibitory law ought to continue undiminished his gifts for temperance work and specify that at least fifty or sixty per cent should go into organizing and conducting new methods of teaching the people the facts about alcohol.

This is necessary for at least one generation, while the old drinkers, some of whom can not be won away from their drinks, are passing off the stage, and while the new generation is growing up.

Experience of the past, knowledge of present conditions, common sense, press the urgency of these educational measures.

—Cora Frances Stoddard.

The Effect of Alcohol Upon the Work of Typewriting

BY E. L. TRANSEAU

THE practical man of affairs is inclined to look with some skepticism at conclusions concerning the ordinary effects of alcohol drawn from scientific laboratory work. The kind of work which the experimenters depend upon for their tests, he argues, is so different from ordinary, outside work that no general application can be made of the results.

To meet this objection, Dr. Walter Frankfurter* carried out a series of tests in Prof. Kraepelin's clinic in which the very ordinary work of typewriting was used. With true German system he arranged all of the detail so as to make absolutely comparable the work done in the normal condition and that done under the influences that were to be tested, which included the effects of alcohol, tea, coffee and bromide, also of fatigue caused by preceding physical or mental work.

As typewriting was new work to Dr. Frankfurter, he had first to learn the keyboard and to practice until his gain in skill from day to day became less than the effect of temporary disturbances. That is, if he happened to feel less fit, or less able to give strict attention on a given day, the loss would more than offset the slight daily gain and be shown by a decided sinking of the curve. In general this curve, like that of other records involving gains by practice, was closely parabolic in shape.

It was not until the 38th day that a stage was reached at which the experimenter was satisfied that his skill was sufficient to warrant the study of comparisons between normal conditions and those affected by some definite influence.

During these 38 days of practice he had tested out the simplest possible way of writing, using only one hand and of that only the index finger, making no distinction between capitals and small letters and inserting no punctuation marks. The other hand was used only to move the carriage and to make a mark on the paper every time a signal bell denoted the passing of a half minute.

Provisions for Calculating Results

The number of letters written in each half-minute gave a basis for observing the

variations in the amount of work done at different periods of the daily test, and hence, the waxing or waning of the influence to be studied. The half-minutes were arranged in groups of eleven, and from an average of the number of letters written in each group, a curve of averages for the day could be computed.

Two records were kept, one of the amount of work done as shown by the number of characters written per half-minute, and another of the errors made per 1,000 letters, that is, quantity and quality.

An important factor in estimating the value of the work was a basis for making proper allowance for variations in working ability on different days, for, as the efficiency of the half-minutes differed widely from one another, so the efficiency of one day differed from that of another, even when all controllable conditions of living were ordered with the utmost uniformity possible. Manifestly, if the work of an alcohol day on which the subject had a headache or was distracted by plans for a coming holiday were compared with that of a normal day when he felt fit and was able to give undivided attention, the comparison would be vitiated.

This difficulty was overcome by making a preliminary test with a part of the work each day before beginning the experiment proper, and allowing a little time for recovery from any consequent fatigue. The results of this preliminary test, computed like the others, give what is called the normal for the day. The difference between this and the subsequent chief experiment shows the changes in efficiency produced by the influence introduced for investigation.

A special point for consideration in estimating the errors is that the faster the subject worked, the more errors he was likely to make. When the work was slow and laborious, each key having to be sought over the unfamiliar keyboard, there was less likelihood of a wrong one being struck than when he could begin thinking of the next before striking the preceding. The most frequent error was touching the key at the side of the one intended.

The subject matter written was always

*Kraepelin's *Psychologische Arbeiten*, Vol. VI, 1914.

the same—a few lines from the beginning of Schiller's "Bell," amounting to about 4,500 letters. This the experimenter could repeat from memory without any variation in time.

Effects of the Alcohol

Alcohol was the first drug studied. The amount used was 40 cubic centimeters, diluted to half its strength and flavored with 20 ccm. of raspberry juice. Normal days alternated with the alcohol days. The alcohol was taken after the preliminary test and an interval of 20 minutes was allowed for the influence of the fatigue of the preceding work to pass off, the same interval being allowed on the corresponding normal days.

Here again is shown the necessity of the preliminary test as a basis for com-

errors being nearly double those of the non-alcohol days when merely the averages of the chief experiments of the non-alcohol days are compared with those of the alcohol days; but when the normal for the day is taken into account, the inaccuracy under the influence of alcohol amounts to 17 times that of the non-alcohol days. This will appear in the study of the tables further on.

Decreased Quantity of Work

The amount of work done on the alcohol days was considerably less when the normal for the day is compared with the after experiments under the influence of alcohol. The diminution in working ability is greatest at the beginning of the experiment and grows less towards the end, as though the effects of "the poison,"

ERRORS IN TYPEWRITING INCREASED BY ALCOHOL

Non-Alcohol Days		Alcohol Days	
<p>Preliminary Tests Av.Errors 16 per 1000</p> <p>d h e j m l f k l e w m p d o h e f i c n z b m p q v e u b k t y b p m o p h i k r v b m l e t f c v y p w</p>		<p>Chief Tests Av.Errors 31 per 1000</p> <p>o r o f s u k w u l e p x e a p t m f l p u a g r b e u g r e p w u l o u x m e m e a l l i e q l a l t n e q u o n t f t i n r d e o u x m e f n e a h o n p r l m a p v o x m r u d e r n t i p u l k w u</p>	
<p>Chief Tests Av.Errors 17 per 1000</p> <p>n w k z p t o r o l s j s j e b t p d p e z m t x u f k w d m r g h l p e k g i m o n w i t r s h n d p l n k z x f w d</p>		<p>Preliminary Tests Av.Errors 14 per 1000</p> <p>k e t m p u t u m k e l v e j l w t p a l a p o a e p e y n f n r e h x b m v l e e</p>	

Fig. 1. The left hand section represents the average errors per 1,000 letters made on the non-alcohol days; the first column standing for the errors of the preliminary test, or normal for the day, which was 16 per 1,000; the second column stands for the chief experiment.

The right hand section represents the average errors per 1,000 letters made on the alcohol days, the column on the left of the bottle indicating the normal for the day and that on the right the chief experiment after the alcohol was taken.

parison, as it so happened that the disposition for the day was considerably better on the alcohol days than on the normal days. The author does not suggest it, but, judging from the after effects shown in other experiments, it seems possible that the normal days following the alcohol days in these experiments may have been affected by the hangover of the 45 ccm. of alcohol taken 24 hours before, as that amount was not a trifling dose. However, the preliminary test as a basis of comparison would show the added effects of the new dose of alcohol.

Lowered Quality of Work

The comparison shows a marked increase of errors on the alcohol days, the

to use the author's words, had then begun to subside.

This loss of speed was interpreted as due to difficulty in finding the desired key, due in turn to an evident impairment of perception and also to difficulty in associating the mental impression with the proper movement. The errors were attributed to premature reaction, a common occurrence under the influence of alcohol.

The sensations experienced from the effects of the alcohol, to which Dr. Frankfurth was not accustomed, are described as first, numbness, followed by dizziness.

Comparing his results in the matter of errors with those of Aschaffenburg,

Frankfurth further thinks that the greater skill of the typesetters, acquired through years of practice, may have made their work more purely mechanical for them and hence they were less liable to errors than he, who with comparatively little practice had to use some thought.

In the experiments for investigating the effects of physical fatigue, Dr. Frankfurth walked two and a half hours or rowed one and a half hours. For the mental tests he devoted an hour to arithmetical problems. Preliminary tests to ascertain the disposition for the day preceded the physical or mental exercise.

After the physical work there was found to be some improvement in the motor part of the typewriting, but a marked increase in errors. The explanation offered is that the walking probably induced a motor irritability which ex-

normal days and the number of errors was distinctly greater.

The figures showing the results of the effects of alcohol as given in Dr. Frankfurth's original report appear in Table I. The curve plotted by the author to illustrate the course of the work through the duration of the alcohol experiment, which ran from the 39th to the 49th days of the entire series, is here reproduced in Fig. 2, while Fig. 1 is a diagrammatic representation of the errors in the preliminary and chief experiments of the alcohol and the non-alcohol days.

The upper part of Table I and Fig. 2 denotes the average number of letters written per half-minute on each experiment day; the lower part, the number of errors made per 1,000 letters. The figures across the top show the serial number of the experiment days. The num-

TABLE I.

Number of experiment day	39	40	41	42	43	44	45	46	47	48	49
WORK											
Preliminary test	99	104	106	106	109	112	115	117	119	116	122
Chief experiment											
Normal day.....	106	102	...	110	...	110	...	110	...	110	...
Alcohol day.....	...	...	102	...	109	...	109	...	114	...	119
ERRORS											
Preliminary test	16	9	9	15	16	19	17	20	15	18	14
Chief experiment											
Normal day.....	12	11	...	17	...	18	...	22	...	23	...
Alcohol day.....	...	...	33	...	25	...	35	...	28	...	36

The top row of figures shows the serial numbers of the experimental days.
The first row of figures under the heading "Work" records the number of letters written in each period of 11 half minutes during the preliminary test. The two rows beneath show the number of letters written per period in the subsequent chief experiment on the normal and alcohol days, respectively.
The figures below the heading "Errors" denote: first row, number of errors per 1,000 letters in the preliminary tests; second and third rows, the number of errors per 1,000 letters in the chief experiments of the alcohol and non-alcohol days, respectively.

pressed itself in a tendency to premature and false motions.

Mental fatigue, on the other hand, decreased both the quantity and the quality of the typewriting. Here the value of studying the course of the day's work in small groups was manifest, as it showed that the effect of the mental exercise was not so much fatigue as it was a temporary impairment of "psycho-motor" activity, that is, of the transition of mental to physical impulses. After a little this impairment gradually wore away and efficiency increased until it reached its maximum in the third quarter of the task. It did not reach as high, however, as on

bers of the alcohol days are printed in heavy faced type.

The figures in the upper part of the table and on the left margin of Fig. 2 show the average number of letters written per half-minute; the figures in the lower part show the number of errors per 1,000 letters.

From the table we see that the work done in the preliminary tests on the non-alcohol days averaged 109 letters per half-minute; in the chief test only one less, namely, 108 letters. This falling off of one letter from the normal of the day would reasonably be attributed to fatigue.

On the alcohol days the preliminary test showed a working average of 114.2 letters per half-minute; but in the chief tests made after the alcohol was taken, only 108.6 letters were achieved, a falling off of 5.4 letters from the efficiency indicated by the normal for the day. To correspond with the non-alcohol days we may attribute the loss of one letter per half-minute to fatigue. This would leave a loss of 4.6 letters per half-minute to be attributed to alcohol.

Expressed in percentages, the working ability in the chief experiment on the non-alcohol days was 99 per cent of that shown to be the normal for the day; on the alcohol days the ability after taking the alcohol was only 95 per cent of what was the normal for the day.

The loss in **quality** of work was far greater than in quantity. This is strikingly shown by the peaks in the dotted line in Fig. 2. From the figures in the lower part of the table we see that the average errors of the preliminary tests on the non-alcohol days were 16 per 1,000 letters, illustrated also in the first column of Fig. 1. The average for the chief experiments on those days was 17 per 1,000. That is, the average accuracy in the chief experiments on the non-alcohol days came within one letter of that shown by the preliminary test to be his normal for the day. This small increase in errors would very reasonably be attributed to fatigue.

Before he took the alcohol on the alcohol days the preliminary tests gave an average of only 14 errors per 1,000 letters, showing a higher normal for the day than on the non-alcohol days. But the errors after taking the alcohol averaged 31 per 1,000 letters, more than double his errors for the normal of the day. Compared with the average increase of only one error per 1,000 letters in the chief experiment of the non-alcohol days, he here made 17 times as many mistakes as his normal for the day indicated he would have made without the alcohol.

From a practical standpoint these experiments of Dr. Frankfurter appear to serve as a precise study of the relation of alcohol to efficiency, and particularly to accuracy, by means of a very ordinary kind of work.

For employers of labor the evidence showing the greater number of mistakes

caused by the alcohol will have a greater interest than the diminution in work. In the case of a skilled laborer it would mean work spoiled, in the unskilled liability to damage property or accidents and loss of life that under the present compensation laws are extremely costly.

Of course, employers have not had to wait for precise experiments of this kind to teach them this fact. They have long known it from more or less costly experience; but such evidence as this can be used to advantage in leading the workmen themselves to understand the dangers to which errors due to drink exposes them as well as their own losses when payment for the damaged goods has to be deducted from their wages.

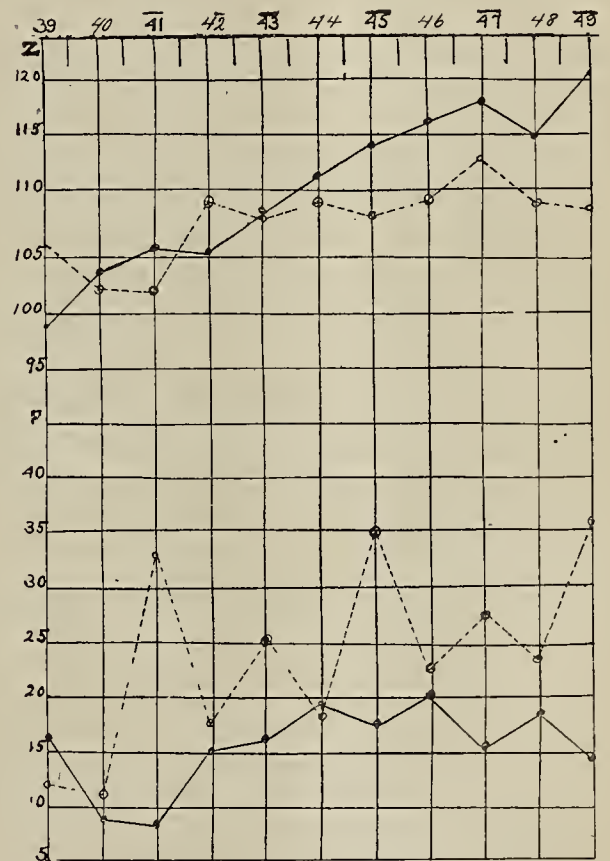


Fig. 2. The row of figures across the top of the columns are the serial numbers of the experimental days, the heavy figures denoting alcohol days. The numbers on the left margin between F and Z denote the number of letters written in periods of 11 half minutes. The heavy line represents the work of the preliminary period of each day, showing the normal working ability for the day. The dotted line represents the work of the experiment proper.

The marginal numbers below the letter F denote the number of errors per 1,000 letters. The heavy line indicates the errors of the preliminary test or normal for the day; the dotted line those of the experiment proper.

*

THE man who dies from the effects of alcohol is just as dead as though he died of smallpox or typhoid fever.

The state should be just as careful to protect its people from one source of disease as from another.

New Studies of Alcohol and Heredity

THE relation of alcohol to heredity in fowls is being studied at the Maine Agricultural Experiment Station by Raymond Pearl, who gives an account of the work thus far in the Proceedings of the American Philosophical Society. As yet, only one generation of descendants has been studied, so that it is too early to know whether defects will appear in succeeding generations, as was the case with the Stockard guinea pigs even where the first generation from alcoholic parents appeared to be uninjured by alcohol.

In the Pearl experiments, alcohol, wood alcohol and ether were administered by inhalation by methods similar to those of Dr. Stockard in his experiments with guinea pigs.

The nineteen birds treated were subjected to the inhalation an hour a day for several months and were compared with untreated fowls of the same breed (Black Hamburg and Barred Plymouth Rocks) treated otherwise exactly the same.

The treated animals, as was the case with the Stockard guinea pigs, were not conspicuously the worse for their treatment, even after eighteen months of it, except that they were too fat, with a consequent decrease in activity.

The birds used in the experiment were bred in the spring of 1915. There was always a group of non-alcoholized fowls which were compared with the treated fowls. There was one group of matings in which the male was treated, the female untreated; and another group where both male and female birds were treated.

The number of eggs produced was normal in all the groups. But the fowls receiving alcohol produced a larger number of **infertile** eggs. This fact, the experimenter explained, was probably due to three reasons: (1) The effect of the drugs on the germ cells of the birds whose sexual activity is somewhat diminished by the treatment; (2) the alcoholized females were less attractive to the males; and (3) probably the oviduct of the treated female did not furnish as favorable environment for the sperm cell as that of the untreated bird.

While the untreated birds had a larger proportion of fertile eggs, the eggs

hatched less well than the fertile eggs of the treated fowls.

The net result of it all was that on the average the alcoholized parents produced per mating a smaller number of chicks than the untreated parents.

When the chicks were hatched, there was no significant difference between those of a treated male and those of an untreated male, when either was mated to an untreated female. When both parents had been treated the chicks averaged somewhat heavier than those of either wholly normal matings or of matings where the father only was alcoholized.

In the matter of growth it was noted that when the chicks were very young there was no marked difference in the average weight in the three groups. But at the end of seven months the chicks of treated parents were heavier than those of untreated parents and fewer of them had died.

In the 1,527 chicks of untreated fowls, 16, or about 1 per cent, were deformed or weak. Of the 234 chicks of the alcohol birds, there was only one defective.

Mr. Pearl is careful to say emphatically that he believes these experiments do not contradict such experiments as those with the guinea pigs of Dr. Stockard, but that they supplement the Stockard work. He finds the explanation of the difference in results in the fact that he was dealing with a different species of life, with birds, not mammals, and believes that the resisting power of the germ cells against injurious agents such as alcohol varies in different species. He suggests that the germ cells of the fowls were relatively more resistant to the same dose of alcohol than the germ cells of the guinea pigs.

Further, he thus explains the apparently better chicks of the treated fowls:

It is known that there is considerable variation in the vigor of the germ cells of any one animal. Only a small proportion of them ever succeed in producing a new individual. He suggests, therefore, that what the alcohol did in the fowls was to make inactive and to eliminate the weaker germ cells which would have developed into weak individuals, so that the progeny came from the stronger cells. In the case of the birds which did

not receive alcohol, some of the weak germ cells as well as the strong ones developed.

This, however, does not mean that alcohol is to be regarded as an advantage in heredity. It means that in the case of the fowls a dose of alcohol was used which was strong enough to make some cells inactive—showing that alcohol can affect germ cells—but not strong enough to overcome the cells having an average high resistance. Whether or not the individuals derived from these cells were absolutely unaffected by alcohol cannot be determined until their progeny arrives.

In the case of the guinea pigs, Pearl believes the average resistance of the germ cells to the same dosage of alcohol was less, so that either they did not produce new individuals at all, or what were produced were defective to a greater or less degree and in one or more respects.

In other words, the germ cells of the mammal guinea pigs were less resistant to alcohol than those of the fowls.

Thus, although at first sight the results of the Pearl experiments may seem to contradict other animal experiments and observations on human families,* as a matter of fact the explanation given by the experimenter goes back to direct injury of germ cells by alcohol. The extent of that injury he suggests will be variable, depending on the relation between the size of the dose of alcohol and the mean average resisting power of the germ cells in any particular species.

While we may not yet be warranted in applying to human heredity the exact percentages of failure or abnormality that prevailed, for example, in the guinea pig families in trying to evaluate the extent of injury done by alcohol to the human species, this animal experimentation makes it clear that such injury is both possible and probable.

In addition to the family histories of infant mortality and physical and mental defects following the use of alcohol by the progenitors, there are certain well authenticated cases of such defect occurring in otherwise sound and normal fam-

ilies when life was known to have been conceived while a parent was under the influence of alcohol.

Fischer, the German missionary on the Gold Coast of Africa, observed the signs of physical degeneracy appear among the natives after the white man's liquors became widely used. Pneumonia and other diseases became more deadly, caries, inability of daughters of drinking fathers to nurse their children, appeared where such defects had never been known before.

Obviously we have no formula yet for the relation between the dose of alcohol and the weakness or vigor of the human germ cell to it. Conditions in the human species can never be reduced to the careful exactitude of animal experimentation. There will always enter factors of heredity, environment, and personal tendencies and habits to be considered in judging of the relation of alcohol to heredity in any particular case.

But the animal and fowl experiments seem to give positive proof of the fact that alcohol, like some other poisons, can penetrate the life cell and either stop its activity altogether or under certain conditions result in the production of defective or weak individuals, while the Stockard experiments with animals produced individuals which, though apparently normal themselves, nevertheless have elements of weakness that appear in their descendants.

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THE SPECIAL IN HUMAN PROGRESS

WE must make the round but we may make it with an upward inclination. "Let there be light" is sometimes said in accents so emphatic that the universe remembers and cannot forget it. We carry our problems slowly forward. With all the ups and downs of every age, humanity constantly rises. Individuals may preserve all its early delusions, commit all of its primitive crimes; but to the body of civilized mankind the return to barbarism is impossible. God said, "Let there be light," a sentence which makes itself felt throughout the human domain where great-hearted men are stirred by it to combat the spirits of darkness.—Julia Ward Howe.

*The observation of Pearl that the results of his experiments seem to be in harmony with the results of the Elderton-Pearson investigation of human families is hardly well-grounded as the latter was not a comparison of abstaining and non-abstaining groups, as were the fowl experiments.

The Man Who First Recognized Chronic Alcoholism— Magnus Huss

So well known are the names of the modern scientific investigators of the alcohol question that the pioneers are sometimes forgotten. Yet, the secretary of the International Temperance Bureau remarks, any volume on the alcohol movement which has any self-respect must recall Magnus Huss, the father of scientific studies of alcoholism. A sketch of his life has lately been published by the Stockholm Illustrated Vidskrift, from which L'Abstinence takes the following facts of interest to those who have been following the Journal's series of famous men and women in the anti-alcohol movement.

MAGNUS HUSS, a Swedish physician, was the author of a noteworthy pioneer work on Chronic Alcoholism, published in two volumes, appearing between 1849 and 1851.

He was born in 1807 of peasant ancestry, son of a country pastor and grew up in the rural life, early becoming accustomed to fatigue and laying the foundations of the firm health that permitted him to reach the age of 83.

In his autobiography, Huss relates from his childhood and youth two incidents which foreshadowed the future philanthropist and opponent of alcohol.

The first occurred in 1812. He was then only five years of age. The year had been a bad one for Sweden and a terrible famine was devastating the country. In the pastor's home there was little enough to eat, but the distress of the peasant was even greater. One winter night while Magnus Huss was learning the alphabet in his father's room, a peasant was shown in who asked to buy a little grain. The elder Huss replied that, to his great regret, he could not let go anything from their already inadequate supply. The man then fell on his knees and begged the pastor to help him. He had already come twelve miles without being able to buy the smallest quantity of grain. His wife and children were dying of hunger at home. "Whereupon, my father," relates Huss, "gave the granary key to the visitor, saying, 'Go see what you can find and take it to your family.'"

The man's face brightened, and he soon went away with what he had found. It was not much, but it had turned his tears into joy. "I wept too," relates the young Huss.

Some years later, the young man was taking his examinations for his bachelor degree at the university. As was customary, the examination period ended in a dinner. "Seeing that all were taking their glass of spirits," relates Huss, "I wished to do the same. It was the first time and presently I was tipsy. I went

home sick and even the next day felt the ill effects. To this small event I attribute the fact that thenceforth during all my years of study I was exceedingly moderate in my use of spirituous drinks, and I can say that from that moment I have never again had a brain disturbed by alcohol."

After two semesters, young Huss would have liked to enter the army, because he was not attracted by the professional life of teacher or of pastor which his father had planned for him. His father conditioned his permission upon the son's first finishing his scientific courses of study. He thought that his son's inclinations toward the vocation of an officer were superficial, and he was not mistaken. In the course of his studies he became passionately fond of the natural sciences and decided to become a physician. In 1835 he received his doctor's degree; later became chief physician of a Stockholm hospital, and thereafter his career developed rapidly. He was physician to two kings, Charles XIV Johan and Oscar I, was made chief director of the hospitals of the kingdom and president of the Collège of Health.

Meanwhile he participated in political life as a member of Parliament. He sat with the Conservatives, which, however, did not hinder him from being a firm supporter of the political rights of women.

In the midst of his honors he did not ignore the misery around him, and it is told of him that often during his visits to the country in the summer he devoted part of each day to treating gratuitously the people of the vicinity who would come a long distance to consult the famous Stockholm physician.

In his later years he followed with keen interest the work of the younger school of medicine, recognizing without any false professional pride that the scientific equipment of the new generation was better than that of their elders. He died April 22, 1890.

His chief work as regards the alcohol question was the two volumes on Chronic

Alcoholism which appeared 1849-1851. In 1882 he published also an essay on drunkenness and its effects, but it is his researches on alcoholism by which he became known. For the first time there was studied in a scientific way the complex phenomena which Magnus Huss brought together under the name of Chronic Alcoholism.

Being an important scientific work, it contributed much to the opening of the eyes of the public to the dangers of intemperance to the individual and society. Huss, moreover, did not confine himself to merely publishing a learned book on the evil, but he also personally labored to combat it.

The first time he had occasion to speak against alcohol was at a scientific meeting at Stockholm in 1852. It was a brilliant assemblage; the king, the queen, the ministry, the members of Parliament had come to hear Magnus Huss speak on the use of spirits in Sweden and to outline to the people, especially to the legislators, their duty in the matter. This courageous and eloquent address contributed in the highest degree to forwarding the solution of the spirits question which Parliament was then considering. After the meeting Huss was called to the King, Oscar I, who asked for a detailed report, and it was to the impression made upon the king at that interview that is owed in part the legislation of 1855 which suppressed the rural distilleries.

The name and work of Huss soon became known abroad. His work was translated into German as early as 1852. In France also the eminent Swede was not unknown. In 1852 he was at Paris,

attending frequently Rayer's Clinic. One day he saw a case which appeared incurable. Huss examined the patient more carefully and told the assistant that the man was not incurable but was suffering from chronic alcoholism. The assistant declared that he was not acquainted with this malady. Huss then asked to be allowed to care for the patient; the request was granted, and three weeks later the incurable was on his feet. This drew attention to Huss. He distributed copies of the German edition of his work, and some weeks later was summoned by the Minister of the Interior who proposed him as candidate for the Monthyon prize of the French Academy. He was also decorated with the order of the Legion of Honor.

After the legislation of 1855 went into force in Sweden, Huss continued to work for temperance, sometimes by articles in journals and reviews, sometimes by more extended works, especially his study published in 1882, when he was 75 years of age, on drunkenness and its consequences for the individual, the family, society and the state. This had an enormous circulation in Sweden. In the seven months after its publication 20,000 copies had been distributed. In 1886, the government appointed a committee to publish and disseminate popular pamphlets for the instruction of the people upon the effects of alcoholic drinks. Huss at 79 years of age was chairman of the committee. Thus, almost up to his last hour, he was faithful to the interest of his early years and his name will endure in the Swedish and world history of the anti-alcohol movement.—Translated for the SCIENTIFIC TEMPERANCE JOURNAL.

* * *

Here and Now

The men of earth have here the stuff
Of Paradise. We have enough!
We need no other stones to build
The Temple of the Unfulfilled—
No other ivory for the doors—
No other marble for the floors—
No other cedar for the beam

And dome of man's immortal dream.
Here on the paths of every day—
Here on the common human way
Is all the stuff the gods would take
To build a heaven, to mold and make
New Edens. Ours the stuff sublime
To build Eternity in time!

—Edwin Markham.

Alcohol and Its Relation to Venereal Disease

By MRS. MARY SCHARLIEB, M. D., M. S.

ON March 1, 1916, the Royal Commission on Venereal Diseases published its final report. This report embodies the result of a large amount of evidence gathered from many witnesses, and is certainly one of the most important documents dealing with public health that has ever been published.

A short paragraph, No. 99, which deals with the relation between alcohol and venereal diseases, commences with the statement that "abundant evidence was given as to the intimate relation between alcohol and venereal diseases," and it goes on to enumerate the reasons on which this opinion was based.

It appeared from the evidence of Prof. F. W. Mott, Dr. D. White and Sir Victor Horsley that alcohol renders a man peculiarly liable to yield to temptations which he might otherwise resist. The truth of this assertion is well known to all doctors from the sad experiences of their patients. Very frequently an unfortunate girl who comes to the hospital infected with syphilis or gonorrhoea confesses that her misfortunes are due to the unaccustomed glass of wine that was offered to her by a so-called friend, on a bank holiday or festive occasion. To the adolescent, unaccustomed to alcohol in any form, even one glass of intoxicating drink of such quality as is usually bought under the circumstances, may, in addition to sexual and other excitement, suffice to cause such a clouding of the judgment and such a weakening of self-control as to lead to acquiescence in deeds that would have been spurned by her when she was mistress of herself.

Not only does the influence of alcohol render the individual more liable to contract venereal disease by the throwing down of protective moral barriers, but it also makes the treatment both of syphilis and of gonorrhoea much more difficult, and most doctors insist that their patients shall be total abstainers, at any rate until the disease is cured. In the case of gonorrhoea the outward manifestations of the disease not infrequently become quiescent under suitable treatment; but they reappear with renewed intensity under the influence of certain stimuli, and

of these those arising from the action of alcohol are among the most potent; indeed, Sir Thomas Barlow, in his evidence before the commission, deposed that when he was physician at the Fever Hospital, and young men were brought in suffering from measles and scarlet fever, they constantly begged that no alcohol might be given them, knowing only too well from past experience that it aggravated the symptoms of gonorrhoea. And, further, he said, "From the very outset right on to the bitter end, the maleficent effect of alcohol on all venereal disease is remarkable." He was also of opinion "that the increasing sobriety among the population of all classes is another factor that may help in the diminution of these diseases."

Among the greatest blessings that science has conferred on the human race is the discovery that certain arseno-benzol compounds, such as salvarsan, gallyl, and karsivan, especially when used alternately with courses of mercurial inunction, are able both to cure syphilis and also very rapidly to render the sufferer non-infectious. The use of these potent drugs has in a very small percentage of cases caused alarming symptoms, but seldom or never in the case of a person who is organically sound. Sir Thomas Barlow in his evidence mentioned that, "in fact, Professor Ehrlich told me that some of the bad cases of damage done by salvarsan have been in alcoholic subjects, and Professor Ehrlich explicitly besought those who are carrying out the treatment on no consideration to use it on an alcoholic person." He added: "The way in which alcoholism shows up syphilitic lesions is one of the commonplaces of pathology. Everybody knows it makes syphilis more damaging and more refractory in every way from first to last. Again, it is very striking how, if you stop a man's alcohol when you are treating him for syphilis, and stop it absolutely, you often have so much more satisfactory results. There cannot be two opinions about that."

Dr. F. W. Mott, who has had very extensive experience of the influence of syphilis in causing general paralysis of the insane and certain other forms of in-

sanity, said in his evidence, "that a person who has syphilis of the nervous system has an invalid brain, and if he drinks he will certainly suffer seriously from it." He also showed that alcoholism plays a very important part in connection with aggravating the disease. He explained this statement by saying that, inasmuch as alcohol lowers the vitality of the tissues, it allows the micro-organism of syphilis a better chance of growth.

The evidence of Dr. Douglas White was very clear and emphatic with regard to the effect of alcohol in encouraging the infection of men and women with venereal diseases. He said that "the doctors who have made inquiries in thousands of cases, both abroad, in America, and here also, have informed us that about 80 per cent of the men who acquire these diseases have told them that they have done so under the influence of some kind of alcohol." In reply to a question by the chairman, he stated that in the case of the army the decrease of alcoholism has been of assistance in diminishing the prevalence of venereal diseases.

Sir Vactor Horsley was equally emphatic in his evidence, and stated that "undoubtedly alcohol aggravates the disease by diminishing the resistance of the individual, as it does with all infective diseases. This has been especially drawn attention to in relation to the later manifestations of syphilis of the nervous system, such as general paralysis of the insane; and as prostitution is directly associated with the drink trade, and the drink trade is responsible for a great deal of prostitution, it follows that the people who are disseminating the disease have their own personal resistance to it greatly diminished."

From all this evidence we are justified in believing that alcoholism has a direct and injurious influence both in furthering the infection of the people with venereal diseases and also in rendering their treatment more difficult and their cure less probable. The evidence given before the commission and the conclusion of the commissioners lead us irresistibly to the belief that the avoidance of infection, the best hope of individual cure, and the prospect of stamping out this national danger, depend very largely on the intelligent care with which we seek the amelioration of the physical condition of the pop-

ulation and the promotion of self-control and temperance in all ways, but especially with reference to alcohol.—*British Journal of Inebriety*, July, 1916.

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Other Links in the Chain

I RATED the occasions for accounting for the immorality of the women and girls that I myself accounted for, that I myself questioned about in this order: First, the failure of family life, parental failure; secondly, the exploitation of the innocent instinct for amusement, the absolute decoy and trap on the part of some of these privately owned recreation parks and especially the dance halls with bar permits, which are absolutely the tap root, and, in my judgment, next to the faulty family life the cause of the downfall of most girls. All you have to do is to do what we do—go around and sit in dance halls on Saturday night from 1 o'clock to 3 in the morning. All the saloons are closed at 1 o'clock and then all the drinkers are turned out to continue their drinking until 3 o'clock in the dance halls, to come in contact with unsuspecting girls, and taking them home.—Prof. Graham Taylor's testimony before the Illinois Senate Vice Committee.

THROUGH the application of the Wasserman tests we are discovering how intimately syphilis is associated causatively with mental defect. Dr. Fernald affirms that even in the highest grade defective, some brain lesions are found and that to a surprising degree these are traceable to the presence of syphilis.—New York Report of the Commission to Investigate Provision for the Mentally Deficient.

IN Minnesota the most direct and frequent cause of any insanity is syphilis. It may roughly be stated as the cause of 10 per cent of insanity. The next prominent cause is alcoholic drinking. It may be said to cause directly and decidedly 10 per cent more and to be a prominent helping cause in about 15 per cent of additional cases.—R. M. Phelps, M.D., State Insane Hospital, Minn.

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"THERE'S a long flow of the sap, before we can detect the sign of a bud."

*

EFFICIENCY is like fire: a good slave but had a master.—*Epworth Herald*.

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The Red Plague's Coadjutor

THE United States Public Health Service has issued a report on **Syphilis in Some of Its Public Health Aspects**. Here, as with alcohol, the exact extent of ravages cannot be known because never fully reported. Its possibilities as a cause of sickness and death appear in the statement that "many cases in which the causes of death are given as apoplexy, softening of the brain, insanity, dementia, epilepsy, heart disease, kidney disease, liver disease, aneurism, arterio-sclerosis, still-birth, congenital debility, malnutrition, etc., should, if the truth were known, be entered as lues."

This is truly a formidable list. It amply substantiates the necessity for the methods of education and prevention which the report outlines as a possible future program.

On one point the report is strangely silent. It makes absolutely no mention of the relation of alcohol to this plague of society which was fully noted by the British Royal Commission on Venereal Disease, as described by Dr. Scharlieb, a member of the commission, in another column of the JOURNAL. Dr. Arthur Newsholme, a well-known British authority, has stated that "according to special investigations, it appears probable that nearly one-half of the infectious with syphilis are received when under the influence of alcohol." Dr. Douglas White is quoted by the commission's report as testifying that about 80 per cent of the men who acquire these diseases do so when affected by alcohol. Either of these estimates makes alcohol a serious factor in this most serious of diseases. It should be observed that this is true not only in contraction but in its treatment.

Dr. G. Sims Woodhead, of Cambridge University, in a recent article on the Pathology of Alcoholism confirms the statements before the Royal Commission quoted by Dr. Scharlieb that alcohol makes absolutely unreliable the usual blood tests for the disease. Alcohol is thus disastrous in at least two respects in connection with this disease. By impairing self-control it facilitates consent to acts by which the disease is acquired; possibly, according to Dr. Woodhead, it increases susceptibility to the disease; it makes treatment and cure of the disease unsatisfactory.

The fight against alcohol is at the same time a health fight against syphilis.

*

Unnecessary Losses of the War

STEPHEN GRAHAM in one of his recent books relates the tragedy from drink and vice that befell the Colonial troops, who, instead of being sent directly to the active seat of war, were stationed at Cairo and other places in Egypt. Many of these sons of the colonies courageously given by their parents to the empire, sound of body, are bearing back to the homes of Australia and New Zealand vicious diseases and unescapable consequences of drink.

A New Zealand publication relates an incident showing that even before the young men left their native island the temptations of drink about the army were difficult to resist.

One mother whose only son, a boy of 19, did not drink when he enlisted came in from the country to see him off. She found him confined to barracks. Some evenings later he went into town to see her, got into a hotel on the way, was carried intoxicated on board the troop ship, and his mother never saw him.

*

Why Wait?

PROFESSOR IRVING FISHER of Yale, writing in the *New York Times Magazine* (Aug. 20), remarked that if we could place in the hands of the Surgeon-General of the United States Public Health Service the authority of the Czar of Russia, who with one stroke of the pen can abolish the use of alcohol among millions of people, we could prac-

tically over night raise the health of America immeasurably.

All of which is very true. But while the Surgeon-General is not likely to have this autocratic power granted him, those of us who read the reports and bulletins of the Public Health Service wish that a somewhat more generous use of the service might be made under the power it already has to teach the people the facts about alcohol. With rare exceptions, these bulletins either wholly disregard excellent opportunities for conveying information about alcohol or else treat the subject so gingerly that its advice carries small weight.

While waiting for more authority the service could put in some good strokes with what it has now.

*

Diabetes and Alcohol

REFERENCE was made in the last number of the JOURNAL to some investigations of the results of using alcohol in diabetes which indicated that it does not serve certain purposes for which it has sometimes been given. The *Journal of the American Medical Association* (Sept. 30, 1916) discussing the treatment of diabetes, says that although alcohol may sometimes be given, it "is not essential in the treatment and should not be administered to patients in whom it produces such symptoms as burning in the throat, headache, and nausea."

*

Public Health Gaining

THE official news that the death-rate has markedly decreased in the United States in recent years is cheering to all those soldiers of health who by investigation of causes, discovery of new methods of treatment, and above all by popular education have been assailing entrenched disease in the name of public health. The summer's wrestle with infantile paralysis, resulting at this writing in seeming defeat in ascertaining the method of transmission of the disease, is a current object lesson of what medical science cannot do while in ignorance of the conditions with which it must deal. No one knows how much the efforts of the summer to stay the child plague have checked its spread, but so

far, at least, the profession is fighting in the dark.

The reports of general decreasing mortality are accompanied by a tribute to the part preventive education has had in producing this result. The educational methods of recent years have literally compelled the people to know certain facts essential to health.

But the end is not yet. A United States health report appearing the very day the press published the account of decreasing mortality cited the estimate of the Federal Commission on Industrial Relations that each of the 30,000,000 workers in this country loses on the average about nine days a year by sickness. Placing the loss of wages at \$2 a day and medical attention at \$1 a day, the total loss to the wage-earners would be about three-quarters of a billion dollars a year. To this should be added loss from invalidism and death, decreased efficiency due to partial disability, the money spent by public and private agencies to support charities, free clinics, hospitals and the like. It appears that \$750,000,000 is probably way below the actual cost of such sickness every year.

The individual is sometimes handicapped in avoiding disease by employment and community conditions. Employers and the community must deal with these. But certain conditions contributing to disease the individual can deliberately avoid. The New York Board of Health points out one of them when it says:

"You cannot be absolutely sure of escaping Mr. Tuberculosis, no matter how hard you try, but you can make his chance of getting you very slim by leaving all alcohol alone."

"While alcohol is not the only poison causing Bright's disease, it is a very noticeable one, and it is the only one taken into the body that can be easily avoided. Nobody who drinks liquor is compelled to do it."

Many employers are indirectly helping the health fight against alcohol by insisting that their workers be sober, or by giving preference to abstainers. The communities and states which close the saloon are taking action in the same direction. One may not conclude too much from slender evidence, but the inquiry is at least pertinent whether the

fact that the rate of alcohol consumption has been practically at a standstill for several years and is even declining at present, whatever the causes, may not be one factor in the more favorable mortality report of the country. Certainly the death-rate from alcoholism proper has showed a trend downward in recent years, if that is any index to the relation of alcohol to the death-rate.

The employer and the community can do more yet to prevent alcohol's levy upon national health. But most important of all is the education of the individual. Every young man and young woman who can be convinced of the desirability and reasonableness of abstinence is a positive asset in the fight for national health. They will themselves be free from impairment by alcohol. They will constitute a body of intelligent public opinion needed to secure and to buttress all other activities against alcohol.

If one-tenth of the money given for work against alcohol were systematically devoted to well organized modern educational methods, the campaign against alcohol would gain vastly in effectiveness and in solid progress. A nation cannot advance in legislation beyond the ideals held by a majority of its people. Ideals can only be changed by persistent spread of information until it becomes knowledge. This seems to be a law of human evolution, and we shall make a mistake that will long delay progress against alcohol if effort and money are given to legislation without adequate provision at the same time for the necessary education.

*

Re-Listing the Deaths From Alcoholism

A COMMITTEE was appointed in 1915 by the Section on Vital Statistics of the American Public Health Association to consider the accuracy of certified causes of death and their relation to mortality statistics. Dr. Haven Emerson, Commissioner of Health, New York, is chairman.

The committee in its report suggests that in the list of causes of death used in making out mortality reports, the old title of "Alcoholism" be divided into the following sub-titles: (a) Acute Ethylism,

(b) Delirium Tremens, (c) Chronic Alcoholism. Of these (a) and (b) are acceptable without autopsy. (C) is acceptable if complicating lesions, sufficient to cause death, are specified.

The committee approved the following inclusions as acceptable terms: Alcohol poisoning, alcoholic delirium, delirium tremens, dipsomania, ethylism, **mania a potu**, temulentia.

The committee suggests the addition to the list of inclusions of the terms **acute alcoholism** and **chronic alcoholism**.

It is the recommendation of the committee that the terms **alcoholic neuritis** and **alcoholic polyneuritis** be transferred to this title from present title No. 73 (**neuralgia and neuritis**).

If these suggestions are carried out it will be one step in advance in getting at the number of deaths directly due to alcohol. The present mortality reports do not at all represent the actual death loss for which drink is responsible.

*

A Michigan Court Decision on Compensation

A WORKMAN was injured in a saw-mill at Traverse City, Mich. The employer paid compensation damages for nineteen weeks and then refused to pay anything more, on the ground the healing of the wound which resulted in continued disability was due to syphilis. The symptoms had led the physicians to suspect the presence of this disease and an unsworn laboratory report upon a Wasserman blood test seemed to show the presence of the disease, although the patient denied that he had ever had it.

The employers contended that compensation "should only be allowed for the period for which the injury complained of would disable a person of average condition not suffering" from the disease.

The Michigan Supreme Court decided that it was impossible to determine what part of the period of disability was due to the injury and what part, if any, was caused by the disease.

The court confirmed the order of the Industrial Accident Board that payments be continued.

The board was of the opinion that the "compensation law does not fix any standard of physical health or make any exceptions for cases of injuries to men

whose health is impaired or below the normal standard, or who carries a latent disease which in case of injury may retard or prevent recovery."

Established as a principle this decision has an important meaning for employers of drinking workmen.

German compensation statistics have shown that the drinkers when wounded required for recovery between three and four times as long as the average insured workman and had about four times as many deaths.

The reasons for this are well known to surgeons. Dr. William Brickley of the Haymarket Relief Station, Boston, summarized these reasons a few months ago saying that alcohol may obscure the diagnosis of an injury, increase the danger of infection at the time of the accident, prevent adequate treatment because of the patient's unreasonableness, increase the danger of complications, retard the process of repair, and give a poorer end result.

All this means that the drinking employee when injured is likely to give the employer more prolonged expenses for accident compensation or impose upon him greater liability to death benefit.

Under the decision of the Michigan Supreme Court referred to, it would appear that the employer under these circumstances can do nothing but pay, if he runs the risk by taking a drinking man into his employ.

The growing insistence of employers upon sobriety on the part of their employees indicates that they are justly declining to assume this unnecessary risk.

*

Milk in Making Automobiles

THE Cadillac Motor Car Company, in the course of its health and safety work, came to the conclusion that a little relaxation and refreshment at the hours of the day when industrial accidents are most frequent might reduce the number of accidents and their seriousness. Hence, at counters in various parts of the plant, milk and buttermilk are sold in pint bottles between 9 and 3:15 in the morning and from 3 to 3:15 in the afternoon. The milk is of the best quality that can be procured, is chilled and is sold at 3 4-7 cents a pint, which is a little less than it costs the firm. During one

year almost 456,000 pints of milk were thus sold to the employees, as well as 265,000 pints of coffee sold during the noon hour. This plan, coupled with excellent restaurant service, is reducing the number and seriousness of accidents, and keeping the men in a better mental and physical condition which, of course, means increased efficiency in the work done.

*

The British Workman Speaks for Himself

OFFICIAL reports, testimony of employers, observations of social workers, have united in pointing out the handicap which drink has been and is in Great Britain during the present titanic struggle.

James W. Sullivan, writing in the *American Federationist*, maintains that the British workman has been greatly misrepresented. He asserts that while it is true that some individuals are spending more money for drink than before the war because they have more money to spend, the "real mass of the men are more sober today than ever." He maintains that some of the irregularities in employment leading to a shortage of munitions were due to imperfect organization for which he holds the employers responsible. He quotes statistics seeming to show that so far as the Clyde workers are concerned, in Glasgow there was a decrease in drunkenness of about 10 per cent in the seven months, August 4, 1914, to March 31, 1915, as compared with the same period in the preceding year.

While there is doubtless truth in what Mr. Sullivan says, the statistical fact remains that the consumption of drink in Great Britain has remained high. The consumption of spirits has even increased during the war. The latest figures report that despite all the agitation on the subject and the restrictive action of the Board of Local Control, the total consumption of liquor in terms of pure alcohol in 1915 was 92 per cent of the quantity consumed in 1914 and 90 per cent of that in 1913. When it is considered that the army has drawn off some millions of men, many of whom would drink more at home than they get in the army rum ration—when they get the latter at all—it is apparent that a present per cap-

its consumption of 25 gallons must mean that relatively more is being drunk in Great Britain than before the war.

Mr. George B. Wilson, the British authority on the statistics of drink, notes that there have been powerful reasons for this increase. Such are "the extraordinarily high rate of wages, the large numbers of unsteady, casual laborers who are earning double or treble their ordinary pay, the abnormal development of the practice of treating and the unprecedented disturbance of normal family life caused by the enlistment of the army and by the present conditions of labor which has resulted in a marked and deplorable increase of drinking among women."

Mr. Sullivan in the *American Federationist* also refers to the influx into employment of the "casual laborer," quoting an English investigator as saying that it is impossible to expect hitherto "casual labor," formerly living and working in poverty, to be capable of working long hours at a stretch and willing to subordinate all personal and private preferences to the public need. Some men of this class "have fallen into habits of drink and idleness which cannot be cured even for this occasion."

In the main, Mr. Sullivan is probably right in saying that in the strain of the war demands, the men are working long hours, often seven days a week. These are conditions that produce fatigue and when drink is handy and the idea prevalent that it helps to work or to bear fatigue, it is not unnatural that the drinking should continue or even increase. A time of stress like war is apt to reveal a nation's weak points. More than one observer has said that some of the difficulties which Great Britain has experienced in adjusting herself to the enormous demands of the war are the consequence of a social system in which poverty, ill-health and the drinking habits of a people have accumulated, producing weaknesses which it took the war to reveal and which startled the nation broad awake.

Whatever may have been the labor situation in the early days of the war, present evidence is that the employee and employer of Great Britain are today straining every nerve to meet adequately the national situation. But drink has too many ramifications through national life to be ignored as an element of national

weakness when its consumption continues as high as it does at present in Great Britain. No one wishes injustice done to the reputation of British labor in this matter. If, as the article referred to intimates, the outcome of the discussion has been to give the workman a realization that he is indispensable to the nation, and that everything depends upon him, it will be of the highest importance that he realize at the same time that his habits as to drink are within his own control and that upon those habits will depend to no small extent his actual value as a citizen of his country.

*

Winning Youth to Drink

IN collecting devices for increasing the use of liquor, the Board of Temperance of the Methodist Church has come into possession of bottles of liquor taken from children evidently prepared especially for them. In Oregon, before the prohibitory law was enacted, school children were found to have hollow toys which had been given them filled with sweetened wine and whisky. In some cases, the children had been overcome with the liquor before the trick was discovered.

A saloonkeeper in Troy, Ohio, distributed, some years ago, some of these nursing bottles containing about an ounce of whisky. School boys had consumed half a bottle before their teachers discovered it and took it away.

A nursing bottle containing whisky bearing the "Merry Christmas" card of a Cincinnati café was taken from a small boy on the street. The Methodist Board has published several photographic cuts of several of these toys and bottles.

Raymond B. Fosdick, former Commissioner of Accounts in New York city, lately said of prostitution that like any other business, it is dependent on publicity, aggressiveness and advertising. "Cut off these accessories and you diminish the business because the supply cannot find a market and the market cannot find the supply. The element of artificial excitation is lacking by which business is increased." This is also true of the liquor traffic. Where its privileges of advertising and urgent solicitation of trade are cut off, there is reduced by so much its chance of securing new users of drink in the boys and girls of the nation.

What Health Authorities Are Teaching

You cannot be absolutely sure of escaping Mr. Tuberculosis, no matter how hard you try, but you can make his chance of getting you very slim by leaving alcohol alone.—New York Health Department.

*

WHERE YOU CAN USE IT

Hot weather maxim as to alcoholic beverages: If you must use alcohol, burn it in a chafing-dish.—Samuel G. Dixon, M. D., Pennsylvania Commission of Health.

*

BABIES OR ALCOHOL—WHICH?

Do you love babies? You can't keep on drinking and have strong babies. Stupefying alcohol or healthy babies—which? Take your choice.—New York Health Department.

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MISTAKEN IDEAS

Too many people think that if they drink alcohol in moderation, such, for example, as three or four glasses of beer a day, they are not doing themselves any harm at all. Very many even think that they may safely drink as long as the stop before getting drunk. These are very dangerous and mistaken ideas. Drinking, even in moderation, has dangers for the brain and nerves, and steady drinking is very bad.—New York Health Department.

*

THE SAFE METHOD AS TO ALCOHOL

ALCOHOL is a subtle poison which usually in the long run, even if taken only moderately, does damage. The safest way with alcohol is never to touch it, any more than you would drink carbolic acid. Half-way measures are dangerous.—New York Health Department.

*

MODERATE DRINKERS' LONGEVITY REDUCED

So great is the influence of alcohol on the mortality rate that insurance companies have become interested in it from a business point of view. Their statistics compiled for over twenty-five years show that not only the constant drinking man's mortality is much higher, but even the moderate drinker has a rate equivalent to a reduction of four years in the average life.—North Carolina State Board of Health.

HOW MUCH FOR EDUCATION AGAINST DRINK?

EIGHT hundred million dollars was spent in the United States during 1915 to maintain institutions for defectives and dependents. Only \$750,000,000 was devoted to free public schools.—Bulletin Chicago School of Sanitary Instruction.

*

PILING UP THE DAMAGES

ALCOHOLISM and drug addiction are the rocks upon which are wrecked the barks of many of the semi-insane and the semi-responsible who are drifting on the edges of normality—the sub-normal or feeble-minded on one side and the super-normal and psychopathic on the other. Twenty-seven per cent of all the admissions to the California State Hospitals are due to alcoholic insanity and alcoholism and drug addiction. Mental tests performed in one of the state hospitals showed that 75 per cent of these individuals are feeble-minded. Some are demented, others are constitutional psychopaths; it is a question whether any of them could be called normal. As well give a year-old child a loaded revolver and tell him not to harm himself as to turn these individuals loose in a community where the sale of alcohol is unrestricted and expect them to keep sober. In addition to the injury which the alcohol inflicts on his own mentality he imposes upon his progeny a hereditary burden which may extend to the third generation. Tredgold, the English psychologist, places alcohol second in the causal factors of feeble-mindedness in children.—California State Board of Health. Vol. II, No. 10.

*

AVOID POISONOUS DRUGS

DRUGS that give you the habit of taking them over and over are poisons. Some of these drugs are cocaine, heroin, alcohol, opium and acetanilid. Many patent medicines contain such drugs and are very dangerous.

The best way to keep your mind and body strong is not to form habits of drinking liquids like spirits, wine, beer, patent drinks sold at soda fountains, and patent medicines. Do not drink much, if any, tea or coffee.

It is wrong to think that drinking much beer, ale and other liquors gives strength.

These only deaden the tired feeling and do not really take it away. You are more tired after drinking them and less able to keep away sickness.—Bulletin of Metropolitan Life Insurance Company.

*

ONCE MORE—WHISKY NO GOOD FOR SNAKE-BITE

SHALL whisky be given for snake bite? No. All authorities are agreed on that. Its only good effect is that it makes the patient indifferent to consequences, through making him dead drunk and overpowering fear is one of the greatest factors in the symptomology of snake bite. MacFarland says: "The usual recommendation is to load up with whisky. In reality nothing could be worse. The use of whisky for snake bite usually does much harm."—Dr. W. A. Evans, former Health Commissioner, Chicago.

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THE CAUSES OF ARTERIO-SCLEROSIS

THE causes of arteriosclerosis fall under the headings of heredity, age, sex, alcohol, syphilis, acute rheumatism, certain acute infections, high living, and hard work. As Osler has tersely said, the onset may be said to depend in the first place upon the quality of arterial tissue (vital rubber) which the individual has inherited, and secondly upon the wear and tear to which he has subjected it. Our parents determine to a great extent the kind of tissue with which we start life; we ourselves may continue the factors which tend to injure this tissue.

Age is also a factor beyond our control.

The story of arteriosclerosis is not the story of the last few weeks, but must comprise the life history of the patient from his cradle, and often include that of his forefathers also. . .

It is not the work but the worry that leads to arterial degeneration. Hard work in these competitive times is a thing but few can avoid, but fortunately it need not be shunned through fear of harmful effects, for if taken up with a cheerful, contented mind it will strengthen and develop rather than weaken the bodily forces. But the secret of successful hard work is happiness; not pleasure, for pleasure is only the gratification of our animal nature. . . Real happiness is the fulfillment of our spiritual desires, and depends upon the possession of character. . . He who in the prime of life has learned this se-

cret of happiness, can bid defiance to the enemies of advancing years.—Charles Edward Nammack, M. D., LL. D., in *Medical Record*, April 15, 1916.

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SOME SOCIAL HYGIENE TRUTHS

MAN cannot play sneak with nature.

DIRT must be swept out of the human soul if one would be healthy.

WOMAN is the moral thermometer of humanity. She rises with the moral standard of the male and falls as his standards fall. Wherever prostitution is rife, the moral tone of men is low.

THE burden of taxation to take care of social delinquents is steadily growing. With the progress of civilization and the further acceptance of the principle that the weak must be looked after, this tax burden bids fair to become crushing. A farmer gladly favors state appropriations for scientific knowledge which will save his livestock, yet the profits earned by such knowledge are wrested from the farmer in the way of taxation to support human misfits. Has the time not come for an entire reversal of state policy—to prevent disease instead of trying to cure it? It costs money to issue printed matter but the returns are of enormous social and economic value.—Indiana State Board of Health.

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COULD the present day direct influence of alcohol and syphilis be abolished, the state would be relieved of a care of nearly one-fourth of the cases now yearly admitted to the Michigan State Hospital . . . [With] the removal of these two factors alone, there would be a tremendous lessening in future generations of the insanity which develops on the foundation of a defective nervous and mental organization.—Michigan Eugenics Commission, 1915.

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WORK DONE SQUARELY

THE longer on this earth we live
And weigh the various qualities of men,
The more we feel the high, stern-featured
beauty
Of plain devotedness to duty.
Steadfast and still, nor paid with mortal
praise,
But finding amplest recompense
For life's ungarlanded expense
In work done squarely and unwasted days.
—James Russell Lowell.

What Magazines Are Saying

WHEN THE WORLD DOOR CLOSED ON THE DRINKER

BY CLARENCE L. CULLEN

EVEN in those remote and often far, out-of-the-way parts of the world where we drifted, the era of sobriety, of clean living, had set in.

That, I came to know, was a world movement just then under way.

The drinking drifter had gone out of fashion. Time had been, and not so many years before, when the white men who turned up, nearly always without any sort of credentials, at these obscure places, were taken at their face value at the moment of presenting themselves, by the influential people of such communities, by the men who had employment to give. They were employed if they had any sort of aptitude for work or business. They were even taken on socially. If they soon proved themselves drinkers or drunkards, that was expected. Why else were they drifting—without credentials? It was to be supposed that something had gone wrong with them, somewhere.

Employers were neither surprised nor angry when this happened. A fact of life—the likable fellow came, went to work, was received at homes by the women, and, when opportunity offered, got drunk. As often as not, when drunk he disgraced himself, the boor came out in him if it was there, the yellow streak showed if he had one. Very well! What else to hope for? The man was not known. He had no papers. No questions were asked of him. He had been taken on his appearance and whatever else of outward merit he had. So there was no complaint.

If the drinking man could go on with his work, he was kept in employment—though he must make up his mind that henceforth the doors of the homes, back of which the women had their being, were closed to him. If he could not do his work he was dismissed, and went his way.

There was a great wandering horde of men of this sort. They were drink-broken men who contrived, with the last poor embers of decency smoldering somewhere in them, to keep up, for varying periods of time, an aspect of decency,

even an air of gentility. But nearly always, soon or late, they would founder on the lee shore of drunkenness. The sober men, the employers, viewed this as pitiable, but inevitable. Nothing better was hoped for from this class of drifters.

But the epoch of this class of drifters was passing and passing swiftly. A different class of men now moved up and down the world. These were clean men, unaddicted men, absolutely sober men, who set upon their travels out of their desire to see the remote spots, wrought upon and sent forth from their own conventionalized corners of the earth by nothing more serious than wanderlust, which, far from being a vice, is simply a sort of hankering for the loveliness of the world.

These men, who were mostly young, thoroughly meant to work their way, to make careers and homes for themselves, whenever they found the spot that suited them. And they were competent to do that. They were physically efficient, fellows who kept themselves in trim. A great many of them were college men. They had credentials of some convincing sort, all of them. Some of them had had experience in business; those who had not were quick to learn, keen to grasp their chance. They were steady, ambitious to "deliver." When they found the business they liked and the "boss" they respected, they were indefatigable.

They had the social graces. They were in no danger of forgetting, at blurred moments, the difference between ladies and—those members of the sex who were not ladies. When they were received in the agreeable homes of high-minded people living in the obscure places, they did not have to be watched for fear they might dredge too deeply from the punch bowl; there was not the peril that they might become suddenly wild and pitch the tables and the wicker chairs about.

This new type of men drove the drifters out. They were dependable, they "delivered." The drinking drifters might have greater flashes of brilliance—when they were sober, but copra, conks, and cochineal are not garnered and shipped

by brilliance; ship chandlers do not get their work done by flashes of wit from the lips of their clever and entertaining, but palpably unreliable, drifting employes; the plantation timekeeper, the purser of super-cargo of an inter-island steamer on an important trading route could not make good to his "boss" through scintillations of fancy, if at the same time he found it practically out of the question to keep decently sober for so long a time as ten days at a stretch.

The very best that alcohol gives, if the word "best" be admissible in connection with a thing that levels all degrees, is always a mere imitation, a mere simulation of any reality, any virtue, or normal life. Your alcoholic tenderness is plain maudliness; your alcoholic courage is cowardice with a flaring wick temporarily attached to it; your alcoholic generosity springs from a mawkish striving for self-glorification; every impulse that proceeds from alcohol is bogus, a travesty on genuineness.—From "The Intimate Enemy," *The Popular Magazine*, July 7, 1916.

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HOW ONE DRINKER FOUND HELP

"BUT my craving for alcohol—" I began.
 "Nothing to it," said the doctor. "That's the result of habit and instinct and fear. Your instinct told you you needed relief from work and improper living conditions. Your former habit of drinking got working—you remembered that alcohol drugs the nerves after a fashion. Then you were afraid of giving in to it and that got you all worked up. As I told you when you were here, we can remove the specific physical craving for alcohol in a few days; but it takes a year sometimes to get the twist out of the mind of a hard drinker."

My experience was not complex, as it shows now in the design. And the simplifying of my experience works in my mind a simplification of innumerable similar experiences undertaken by others. This is about it:

My first spell of excessive drinking came about through grief and worry, as proximate causes; grief for the loss of my wife, worry over the loss of the little stake I used to call my fortune. The physical results of this crisis were re-

moved by the medical treatment. At the same time, along with the medical treatment and as part of the general treatment I was taking, my mind was strengthened and given a push in the right direction by my talks with the doctor. Some false mental valuations were corrected.

The near-spell, as I will call it—when I should probably have given in and begun drinking again but for an accident—is to be accounted for simply by overwork, with a consequent physical craving for relaxation, plus an associational fear of using alcohol because I know now that when I am tired or seedy I need rest or medicine—not a drink! I have no temptation now to drink, because I have no fight with drink. I'm not afraid of it.

If you want to do something for the alcoholic, or for the boy or man who may become an alcoholic, do these two things: if your subject's body is poisoned, scientifically unpoison it; if his mind is poisoned, find out what the poison is and frame an antidote.—From "Patient Number 24" in *Everybody's Magazine*, September, 1916.

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THINKING SMALL THOUGHTS AFTER DRINKING

"SPEAKING of drink," he said, though nobody had been, "you hear it said that alcohol stimulates the wit and imagination. That's rot. Have you ever been on the water wagon at a dinner where every one else was drinking? They say things they wouldn't think worth saying, and laugh at things they wouldn't think of laughing at, if it weren't for the champagne. The drinking doesn't make them brighter. It merely lowers their standard of appreciation. When you're stone sober, it's pitiful. Have you ever dreamed something, and thought, 'If only I can remember that when I wake up! It's great!' And once out of a hundred times you do manage to remember it and—it's pitiful. Nobody thinks great thoughts when he's drunk. It's only that little thoughts seem big. There's nothing to it, Barry."—From "The Golden Idiot" in *Ainslee's Magazine*, September, 1916.

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IDEAS or ideals do not change by magic or prestige—they can only change by the slow operation of intellectual conversion.—Charles Sarolea.

SHALL DRINKERS BE TOLERATED?

THE boss says, "Cut the booze."

In the everyday American tongue, that was the conclusion given by the Committee on Inebriety of the National Conference of Charities and Correction, which met recently. The report, dealing with "The Attitude of Large Employers Toward the Use of Alcohol by Their Employees," was made by Alexander Fleisher, director of the welfare division of the Metropolitan Life Insurance Company.

"This analysis indicates," says Mr. Fleisher, "that a number of employers are making up their minds on the use of alcohol by their employees. By whatever reasoning they are arriving at their conclusion, whether they feel it is in the interest of the public, of the employee or of good business, they seem to be taking a stand against the man who uses alcohol. They are not considering the detailed and intricate question of the effect of alcohol on the mind and body—these preliminaries have been ignored; they find the non-drinker the more satisfactory employee."—*Factory*, October, 1916.

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BOYS ACROSS THE SEAS

"**D**RUNKENNESS was formerly a most prevalent crime in the army," says Lord French, who attributes much of the elimination of intoxication once known in the British army, to the work of the Y. M. C. A. and kindred bodies.

"When I first joined the army, the only refuge of the soldier was the canteen. In those days we had old soldiers, who practically lived on beer, and quite often sold their food to young recruits to buy beer to live upon. You hardly see a drunken soldier now. In many other directions the work of these institutions upon the spiritual and moral welfare of the soldier has been very marked and clearly proved."—*Association Men*.

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"BEES"

THIS term, according to a Department of Agriculture circular, is applied to a kind of wild yeast or ferment, supposed to have originated among the mountaineers of Tennessee and Kentucky. A mixture of corn meal and molasses exposed to the air becomes impregnated with wild yeast and other bacteria, and the ferment thus produced has been used

under the name above mentioned in certain primitive communities for making a sort of vinegar or certain alcoholic beverages, by adding it to a mixture of water with either brown sugar or molasses, which is then allowed to work or ferment. The attention of the department has been directed to the fact that ferments of this character are now being offered for sale more or less widely under the names "vinegar bees," "beer bees," "Australian bees," etc., and it is claimed by their promoters that, when added to solutions of sugar or molasses, they will produce excellent vinegar, beer or wine. The department pronounces these claims fallacious, and suggests that harmful as well as desirable bacteria are likely to be caught from the air in the "bees"-making process.—*Science*.

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UNIVERSITY MEN AND WOMEN FIGHTING DRINK

IN the year and a half since the Topeka student prohibition convention closing January 1, 1915, at which "the Challenge of the Prohibition Movement to the Present Student Generation" was first issued, more than 3,000 students have given time and personal service, almost always without financial compensation, to anti-liquor field work under various agencies, or are pledged to do so immediately. In Ohio last fall 650 students, 55 of them young women, went from eighteen colleges into small towns, country districts and on city streets, singing and speaking, distributing literature, giving stereopticon talks, polling voters and aiding the local committees. In Minnesota from 25 to 75 have been engaged in prohibition work every summer for ten years. This past summer was no exception. In many other states there has been similar work.

Over a hundred colleges are now offering curriculum courses in the study of the liquor problem, according to a recent investigation of the Intercollegiate Prohibition Association.

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GIVING POSTERITY A SQUARE DEAL

IT is not giving posterity a square deal to abuse and debilitate one's personal health by faulty habits and manner of living, and so pass on to his child a feeble constitution to start with.—*Bulletin*, Chicago Department of Health.

From the New Books

ALCOHOL AND CANCER

BY FREDERICK L. HOFFMAN, LL. D.

SOME early writers on cancer attributed cancer of the stomach to the general use of acid wines and cider. The available evidence, however, is not conclusive, further than that excessive indulgence in alcoholic drinks is quite likely to produce a chronic gastritis, which requires to be considered as a pre-cancerous disease.

Hepatic cirrhosis is induced in chronic alcoholism in many cases, but especially in those who habitually take whisky undiluted into an empty stomach. This habit is certainly not very general in this country.

The common use of raw whisky has been connected by Boas with cancer of the oesophagus.

Keyburn, in an interesting discussion of the medical treatment of cancer, considers the influence of alcohol as a predisposing cause in cancer, particularly as regards the insidious and dangerous effect of alcohol on the tissues, even from small quantities, when taken regularly, and the effect of alcohol *in the dilute form* to enter into the blood and then circulate in the blood through every tissue and organ of the body. He, therefore, concludes that the effect of this is that "The alcohol, by powerful affinity for the water of the tissues, dehydrates and prematurely hardens them; not only this, but alcohol is a retarder of waste in the body."

Sir Alfred Pearce Gould, in the Bradshaw Lecture on Cancer, reported in the *British Medical Journal* for December 10, 1910, considers alcohol an etiological factor of considerable importance. Referring to the occupational mortality statistics, according to which persons connected with the liquor traffic show an exceptionally high mortality figure from cancer, he concludes that "the cancer incidence in any trade varies with the attendant habits as regards alcohol," and from the point of view of chronic irritation, X-rays and alcohol—these so-called causes of cancer—agree in being conditions that wear out the cells of a part;

they add to the number of cell generations, they deteriorate the evolution of the individual cell, they appear to lessen the hold over the cell of the great primal cell law, and singly or in combination, they cause cancer. There is serious risk, however, in carrying this conclusion too far.

Bainbridge points out that the prejudicial influence of alcohol on cancer is a debatable question, but he observes, "In the case of the alimentary canal, at any rate, this possibility has been practically established by the greater frequency with which males suffer from cancer of the upper half of the alimentary canal and stomach, especially in occupations prone to alcoholic indulgence."

Hastings Gilford, in his treatise on "Disorders of Post-Natal Growth and Development," concludes that there is no clear evidence that cancer in general is due to the drinking of alcoholic intoxicants. He quotes Dr. Snow as one who in common with many other observers believes that alcohol has a conspicuous share in giving rise to cancer of the lips and tongue. He also quotes Sir Victor Horsley, to the effect that, "There is a great excess of (malignant) disease in persons employed in those occupations in which alcoholic indulgence is common," and "This is not surprising when we remember that one of the factors producing cancer is the influence of chronic irritation, and alcohol causes irritation of the tissues with which it comes in contact."

There can be no question of doubt but that alcohol is a cause of degeneration, and Gilford elsewhere observes that "the tissues of the alcohol drinker are more vulnerable than the water drinker, and that, furthermore, the stimulating effect of alcohol is to a large extent the result of an increased flow of blood, not founded on physiological reasons, and any increase of gastric juice, any extra warmth of the skin or exaltation of mind so produced is pathological, for it is due to a morbid congestion and not to a natural flush. The action of alcohol upon the healthy stomach is essentially that of a disorder,

and carries with it all the evil which the word implies."

In the cancer investigation in Baden one of the predisposing conditions determined with approximate accuracy was alcoholism, which accounted for about 7.5 per cent of the cases returned for the year 1904 and 6.25 per cent for the year 1906. Even chronic inflammation and irritations caused by gall-stones, etc., accounted for a smaller proportion of cases than alcoholic misuse. . .

The available statistical data would seem to indicate that both alcohol and smoking are directly contributory factors, to a variable degree, and particularly so as regards certain organs or parts of the body affected.—From *The Mortality from Cancer Throughout the World*.

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THE DRINK PROBLEM OF TODAY

EDITED BY T. N. KELYNACK, M. D.

Drunkenness Not Dependent on Spirits.—Six thousand years ago the Egyptians had several kinds of wine, as well as beer, and they have left abundant graphic representations of their drunken habits; we see them depicted in attitudes of helpless intoxication, or in the act of being carried home from their feasts, or indulging in inane drunken revelry, such as standing on their heads or otherwise "playing the fool;" and it is, moreover, clear from these delineations that the women were by no means exempt from the vice.

That the Jews were not always strictly sober is shown by Biblical history. We know from Homer that the ancient Greeks were familiar with wine many centuries before Christ. Wine, indeed, was quite an ordinary drink with them, and the prevalence of inebriety among them is suggested by the fact that the prospect of a hereafter consisting of an "everlasting drunken orgy" was held out as the fairest award of virtue.

We have but scanty knowledge of the inhabitants of northern and western Europe before the Christian era, but that drunkenness was rife in the west of Europe in the first century is evident from a passage in the elder Pliny in which he exclaims against the "drunkenness of the whole world," adding that western nations intoxicate themselves with "moistened grain;" and the conception of Odin's paradise, in which ale was quaffed in

large goblets until a condition of celestial intoxication was engendered, points in the same direction.

Distillation was first employed by Geber in the seventh or eighth century, and it was practiced by the Arabian and Saracenic chemists. Spirit-drinking did not, however, come into vogue until several centuries after this; in our own country not before the Tudor period. Brandy, produced by the distillation of wine, was first made in the early part of the fourteenth century.—Harry Campbell, M. D., F. R. C. P.

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Alcoholism and Poverty.—Familiarity with the phenomenon of alcoholism on the rice and millet fields of Sindh and in the mountain glens of Japan leaves the present writer cold before an assertion that it is solely because he works in a British shipbuilding yard or cotton mill that a given Englishman is an alcoholic. On the contrary, the experience of the oldest workers in the C. O. S. has included such an immense variety of family and individual circumstances; they have seen similar circumstances met in such a variety of ways, that they are left with the conviction that there is always scope for choice, and that men or women indulge to excess in alcohol, and in consequence lose health or employment, or both, and neglect home and children, it is because they choose to do so.

Poverty in every sense in which the word can be used is produced on a terrible scale by alcoholism. The most recent presentations of the fact are as convincing and dumbfounding as were those of 50 and, for the matter of that, 500 and 5,000 years ago.

In every case referred to here alternative possible causes of poverty have been duly weighed. Workers of twenty years' standing express skepticism about the frequency of the drink habit being caused by the discomfort and strain of poverty. The devil-may-care hand-to-mouth drinker does not come into these examples at all because no one refers such people to the Charity Organization Society.

The records contain numerous examples where an increased income due to separation allowances has not led to better homes and better cared-for children, but **the reverse**, while the same windfall in sober houses has produced these desir-

able results.—Rev. J. C. Pringle, Secretary of the Charity Organization Society.

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Alcohol and Fatigue.—Increased speeding not only wears out the individual, but by exhausting the workman it becomes a cause of accidents. Increased speeding induces fatigue, and fatigue is a cause of accidents. Fatigue is due to the action upon nerve endings and nerve cells of poisonous products formed within the body as the result of muscular metabolism. For a fatigued person to add to his blood, unless in minute doses, another poison in the form of alcohol is only to make matters worse rather than better. What are required are longer periods of rest.—Sir Thomas Oliver, M. D., LL.D., D. Sc.

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England's Experience With Beer Legislation.—The Beer House act of 1830 allowed anyone to take out a license, at a very low duty, and sell beer. The result was appalling. Drunkenness increased in every direction to an alarming extent. The new Parliament elected under the Reform act of 1832 appointed an exceptionally strong committee to inquire into and report upon the evil. They did so in 1834 in one of the strongest reports on the liquor trade ever issued. Restrictions were imposed, but from that day to this, in spite of the many acts of Parliament which have been passed with reference to them, the beer-houses of England and Wales have been one of the most undesirable branches of the liquor trade, and a constant source of difficulty to licensing justices and licensing reformers.

Thirty years later, in spite of the warning experience of the beer-houses, the same idea (in principle) found expression in the deplorable wine and grocers' license legislation of Mr. Gladstone in 1860 and 1861. The theory was that if opportunities were provided for obtaining a glass of wine at confectioners' shops, and if other alcoholic beverages could be obtained in bottle from grocers and other shops for consumption at home, many people would refrain from going to public houses and would avoid the temptations to remain there and drink. The result, as in the case of the beer-houses, was not a diminution but an increase in the consumption of alcoholic liquors, and the increase in drinking among women, which has been one of the most regret-

table features of the last fifty years.—Sir Thomas Whittaker.

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Medical Use of Alcohol.—It is very necessary to state definitely that a narcotic such as alcohol, possessing possibilities for the initiation of habits and methods of life which may be productive of infinite evil, should never be self-administered and must only be employed as a therapeutic agent under strict and scientifically directed medical supervision.

Even the generally accepted view that alcohol was desirable if not necessary for the advanced in life, an opinion expressed in the saying that "Wine is the Milk of Old Age," is now being discarded and declared by experts to be "a great and dangerous fallacy."—T. N. Kelynack, M. D.

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THE FUTURE ALCOHOL PERIL FOR RUSSIA

BY PROF. J. Y. SIMPSON

IN any attempt to forecast the future, a great number of considerations has to be taken into account. The permanent prohibition of vodka is generally assumed to be bound up with the promises of the Emperor to that effect. So far as any indications go, this would be in accordance with the desire of the great majority of the nation today. When we pass to the consideration of the continued prohibition of wine and beer, the difference of opinion is much more marked, as, indeed, is expressed in the varying decisions of the different municipalities with regard to their sale at present. "What I have seen of the advantages of prohibition," said the Professor of Economics already referred to, "has brought me to believe in the absolute restriction of beer as well as vodka. To fight the intoxication produced by beer is ten times as difficult as the fight against intoxication by vodka. Beer intoxication is one of the worst forms of intoxication in the world. If we can arrange that for twenty or twenty-five years the population will not have the opportunity to drink, then the question is solved. If we can do that—and I am not unhopeful—Russia will be saved. But if the liquor interests prove too strong, then the outlook is dark for Russia."

As yet, however, no very clear idea has been formed on the subject of the prohi-

bition of beer after the war. There is a tendency in some directions to work in the direction of increasing the use of light beers after the war. Even if this is approved, the price will probably be raised, as also the tax. On the other hand, there is a fear that to permit the continuance of even really light beer is to countenance a situation which will be difficult to control. There are only some two hundred million rubles of capital sunk in Russian breweries, so that the trade can be easily bought out. The question of the continuance of beer is then still very open. The question of the continued prohibition of wine is more complicated because of importation. Further, there are wine-raising districts in Russia—e. g., Bessarabia, the Crimea and Caucasus. The wine-growers in the Crimea are wealthy; on the other hand, those who carry on the industry in the other districts are mainly small proprietors, so that to prohibit the culture of wine would involve them in ruin. It is probable, therefore, that the wine industry will continue as formerly, though possibly under some restrictions.—From *The Self Discovery of Russia*.

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WILL PROHIBITION PREVAIL IN RUSSIA

BY STEPHEN GRAHAM

“WHAT has happened to the tramps and beggars who used to sleep here o’ nights?”

“There are fewer of them,” said the doctor. “Since the sale of vodka stopped and the war began the old night population seems to have vanished. I do not know how much good the war will ultimately bring, but the sobriety which it has already brought would justify it.” . .

The great question is: Will complete prohibition be feasible after the war is over? Will not the warriors returning from victory demand drinks to toast the Czar and the allies and their generals? Will there be vodka riots, or will the men who return be ready to sacrifice their old habits for the national ideal? I am inclined to think it will be the latter. The soldiers will almost unanimously approve the prohibition. Though the soldiers would give anything for a drink, yet they are glad it is impossible to get it. . . .

If Russia is going to be truly strong in this matter she has got to raise a new

generation who not only deny vodka but who would not enter the vodka shop if it were open. But whatever happens, temperate Russia will have a great deal more driving power, will be more ambitious and more able to get what it wants in the world than dear melancholy drinking Russia.—From *Russia and the World*.

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OPTIMISM

BY EDWARD L. TRUDEAU

OPTIMISM is a product of a man’s heart rather than of his head; of his emotions rather than of his reason; . . . a mixture of faith and imagination and from it springs the vision which leads one from the beaten paths, urges him to effort when obstacles block the way and carries him finally to achievement, where pessimism can see only failure ahead. Optimism means energy, hardships and achievement; pessimism means apathy, ease and inaction. Optimism may and often does point to a road that is hard to travel, or to one that leads to nowhere; but pessimism points to no road at all.

Let us not, therefore, quench the faith nor turn from the vision which, whether we own it or not, we carry, as Stevenson’s lantern bearers their lanterns, hidden from the other world; and, thus inspired, many will reach the goal; and if for most of us our achievements must fall short of our ideals, if when old age and infirmity overtake us “we come not within sight of the castle of our dreams.” nevertheless all will be well with us; for, as Stevenson tells us rightly, “to travel hopefully is better than to arrive, and the true success is in labor.”—From *The Beloved Physician*.

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WORKS JUST AS WELL IN AMERICA

ONE of the American missionaries in Japan at Matsuyama recently prepared some posters on alcohol which she placed on the gate of her house. Hundreds of people read them. Many stopped in groups to listen as one of their number read. The superintendent of the Iyo railroad gave permission to post them in twenty stations of the line. A reporter of a local paper wrote shortly afterward that in one of the stations he saw a crowd eagerly looking at something which seemed to be arousing great interest. Some of the people were saying, “Ah! Sake is a bad thing.”

The Library Table

THE DRINK PROBLEM OF TODAY. T. N. Kelynack, M. D., Editor. New York: E. P. Dutton & Co. \$2.50 net.

This new and revised edition of a work first issued in 1907 brings the drink situation in Great Britain up-to-date. While its statistics and illustrations are chiefly British, it contains many facts and principles of general application. Fourteen articles by as many writers deal with the varied medico-sociological aspects of the question. Several of the articles are entirely new, growing out of the new conditions arising in connection with the war and contain valuable information as to the alcohol problems which Great Britain is facing. The volume has always represented a conservative point of view both as to the origin of alcoholism and methods of dealing with the drink question, though the present edition at several points takes more positive and advanced ground than the earlier edition. The discussion of the biological origin of the drink question, under a new title, is practically identical with the earlier unsatisfactory theoretical article, based upon the unproven hypothesis that man has an inborn craving for alcohol. This is contradicted squarely by a quotation in another article which maintains that the craving for alcohol "is never instinctive, never inborn, but always acquired, that no man ever craves alcohol who has not had previous experience of it. As a specific habit it has its origin essentially in environmental influences." The importance of the point of view in this matter is that it determines to a considerable extent the methods of dealing with the question.

Public ownership of retail liquor-selling coupled with the local veto and provision for indoor amusement and recreation centers is the substance of the legislative recommendations for dealing with the traffic. A new chapter on the educational development of national sobriety brings together much valuable historical information as to the relation of the medical profession to the prevention of alcoholism.

ANTI-SALOON LEAGUE YEAR BOOK FOR 1916. By Ernest H. Cherrington. Westerville, Ohio: Anti-Saloon League of America. Cloth 50 cents. Paper 25 cents.

This annual contains for 1916 an excellent summary of present alcohol conditions throughout the world and in the United States in detail. Information is given as to the legislative action and results in each state of the Union, details of votes in Congress on temperance measures, summaries of social and economic statistics of groups of states according to their methods of dealing with the liquor traffic. A roster of officials of national temperance organizations is included, also a bibliography.

THE MORTALITY FROM CANCER THROUGHOUT THE WORLD. By Frederick L. Hoffman, LL. D., Statistician Prudential Life Insurance Company. Newark: The Prudential Press.

A disease most dreaded perhaps of all diseases that causes 80,000 deaths annually in the United States and is increasing approximately

at the rate of 2.5 per cent a year warrants the careful and exhaustive compilation of facts which Dr. Hoffman has gathered in this volume. He has brought together not only detailed statistics of mortality from many nations but reports of investigations and the various conclusions and opinions as to the causes and extension of the disease. The relation of alcohol receives due treatment as a probable cause through chronic irritation of the tissues. What Dr. Hoffman has to say on this subject will be found in another column.

LAWS RELATING TO SEX MORALITY IN NEW YORK CITY. By Arthur B. Spingarn. New York: The Century Company.

This manual of the federal state and local laws and decisions relating to sex morality while helpful to magistrates since it brings together statutes and decisions bearing on one subject from many legal sources, is intended primarily to assist non-professional persons dealing with these questions. It deals with laws relating to sex offenses, including liquor laws, with regulations and offenses affecting sex morality, provisions affecting children, and with the machinery of arrests courts, commitment sentence, probation, parole and pardon.

Under the New York laws voluntary intoxication is not considered an excuse for a criminal act committed while in that condition. When intoxication results in a fixed mental disease of some continuance or duration it may relieve from criminal responsibility.

WINNING THE FIGHT AGAINST DRINK. By E. L. Eaton, D.D. New York: The Methodist Book Concern, \$1.00.

A volume written primarily to give ministers an insight into the various phases of the alcohol question and to inspire action as leaders in moral responsibility, with a special view to enabling them and all leaders to meet perplexing questions liable to be brought upon discussion of the subject.

TOBACCO HABIT EASILY CONQUERED. By Max MacLevy. New York: Albion Society. \$1.25.

How to do it yourself by self-mastery and health regeneration is the guiding principle of a breezily written book which under the headings of twenty "Dictums" mental and physical suggestions that will enable one, who desires to do so, to abandon the use of tobacco. The appendix has a compilation of facts about tobacco and a long bibliography. The author welcomes correspondence giving further specific information as to injury done by tobacco, and benefits derived from abandoning its use.

CAUTIOUS

"Mc Tavish and MacPherson are adrift at sea in an open boat.

"McTavish (on his knees)—'O, Lord, I ken I've broken maist o' thy Commandments, and I've been a hard drinker all my days. But, O, Lord, if we're spared this time, I promise never—'

"Mac Pherson—'I widna commit myself ower far, Donald. I think I see land'."—Life.

Scientific Studies of the Alcohol Question

THE INTERNATIONAL SERIES of pamphlets has been published for students of the alcohol question who desire to know at first hand what scientific and other leaders of thought hold to be true, and why. The pamphlets represent the work and viewpoints of men in six countries—Switzerland, Germany, Austria, Belgium, Finland and the United States. Most of the material has never before been conveniently available in English for the general reader.

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2. THE UNIVERSITY STUDENT AND THE ALCOHOL QUESTION. By Dr. Emil Kraepelin, Director of the Clinic for Psychiatry, University of Munich. 16 pages.

3. ALCOHOL AND MENTAL WORK. By Dr. A. Smith, Hospital Medical Director, Marbach on Lake Constance. 24 pages.

4. THE ATTITUDE OF THE SOCIALIST PARTY TOWARD THE ALCOHOL QUESTION. By Dr. Emile Vandervelde, Professor of Law in the New University, Brussels; Premier of Belgium. 24 pages.

5. THE INFLUENCE OF ALCOHOL UPON THE FUNCTIONS OF THE BRAIN. By Rudolph Wlassak, M. D., Vienna. 16 pages.

6. THE INFLUENCE OF ALCOHOL UPON THE RACE. By Dr. Alfred Ploetz, Editor of Archiv für Rassen-und-Gesellschaftsbiologie, Berlin. 32 pages.

7. RACE WELFARE. By Dr. Max Gruber, President of the Royal Hygienic Institute, Munich. 16 pages.

8. EFFECTS OF ALCOHOL ON RESISTANCE TO DISEASE AND OFFSPRING. By Dr. Traav Laitinen, Director of the Medical Department, University of Helsingfors. 16 pages.

9. THE ALCOHOL QUESTION IN THE LIGHT OF SOCIAL ETHICS. By Dr. B. Strehler, Neisse, Germany. 16 pages.

10. INDUSTRIAL PHASES OF THE ALCOHOL QUESTION. By Alfred H. Stehr, M. D., Doctor of Political Economy, Magdeburg. 24 pages.

11. THE CAUSES OF ALCOHOLISM. By Dr. A. Cramer, Gottingen, and Prof. H. Vogt, Frankfurt. 16 pages.

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No. 2

Today is your day and mine;
The only day we have;
The day in which we play our part;
What our part may signify in the great world we may not
understand;
But we are here to play it and now is our time.
—David Starr Jordan

The Literature of the Alcohol Question

BY CORA FRANCES STODDARD

From an address before the Massachusetts Library Club, Greenfield, Mass., October 21, 1916

SOME dozen years ago, a European physician with collaborators in all the principal countries set about preparing a bibliography of the alcohol question. The result was a closely printed volume of over 500 pages. It contained ten or twelve thousand names of authors and titles of books, articles, old and new, treating of the various aspects of the problems presented by the beverage use of alcohol. If this bibliography, published in 1904, were to be brought up to date, I venture to say that its size would be doubled, for during the intervening years the output of written productions on this subject in every country has increased by leaps and bounds. . .

Each library must probably decide for itself how much attention and space it will give to what may be called the technical literature of this subject.

On the whole, a special library in the hands of those familiar with the literature of the subject affords the widest range of information because when closely indexed, as is the case with the Scientific Temperance Federation library, much material becomes available that otherwise may be overlooked.

Even city public libraries, however, could greatly extend their resources of information on this subject by providing themselves with foreign periodicals like *Die Alkoholfrage* or *Internationale Mon-*

atsschrift zur Erforschung des Alkoholismus und Bekämpfung der Trinksitten, or similar British and American journals. These contain not only serious discussions of the scientific and social facts about alcohol, but bibliographies, book reviews, reports and abstracts of experimental work which enable one to keep in touch with the progress of scientific investigation and interpretation of facts. . .

When we come to what in distinction from the technical literature of the alcohol question may be called the popular literature, we may frankly recognize that a situation is met which probably does not exist in any other of the classes of books under discussion on this program.

Your libraries contain books on the improvement of agriculture, promotion of technical training, but I do not imagine that they receive many books written to oppose agriculture or technical progress.

The peculiar situation in literature on alcohol develops, of course, from two facts: (1) That there is involved a generation-old custom of using alcoholic drinks, and (2) that there are powerful financial interests which desire both to retain and to encourage sale and use of alcoholic beverages. On the one hand, then, is a literature which presents the individual and social effects of alcohol ascertained by scientific experiments and social investigations. Some of it simply

presents the facts; some of it draws conclusions from the facts. The trend of this literature is unfavorable to alcohol. Even the technical scientist who rigidly guards himself against making practical applications of his findings contributes in a certain degree to the literature against alcohol when the results of his experiments show clearly that an old-time belief concerning alcoholic beverages is erroneous. On the other hand, there is a steadily and purposefully increasing literature which defends the use and sales of alcoholic beverages.

Many of the European scientific men have heartily placed themselves at the service of the movement for popular education in the facts about alcohol. This has given the continental anti-alcohol movement a powerful and influential literature that not only presents the facts about alcohol but applies them to everyday life and action. . . .

This has been the source of a considerable part of our modern American literature on this question. Our own American scientific investigators of this question, with but few exceptions, have preferred not to step into the arena of public discussion, reserving themselves solely for the work of investigation.

We have a few compilations of the scientific facts, for instance, such as the reports of the Committee of Fifty issued some dozen or fifteen years ago. These reports were compiled by an admittedly conservative group of men, so that any facts unfavorable to alcohol which they present may be considered as well within the margins of actuality. But in the conclusions drawn from their findings the reports did not always deal fairly with the reader. Some terms were used in the description of scientific data which, popularly, meant one thing, but which, if put into more concrete form with a statement of exactly how they were used, would have conveyed quite a different impression to the reader. . . .

General Sources of Information for Libraries

An important source of information as to the effects of alcohol upon the individual and society is, of course, official reports which are giving increasing attention to the subject, such as the President's Homes Commission report and the report on National Vitality, both pub-

lished as Senate documents, the report of the Massachusetts Commission on Drunkenness of 1914. The state and city health bulletins every year are putting out more information about alcohol.

The insurance companies of Great Britain for many years have afforded important information as to the comparative longevity of abstainers and non-abstainers. American companies now give us even more showing the death rates among various classes of drinkers. The industrial insurance companies are putting out facts against alcohol in their popular educational bulletins.

Commissions on insanity and feeble-mindedness, studies of tuberculosis and child welfare, delinquency, probation, prison reform, are all contributing today to the literature of the alcohol question.

Books on Collateral Subjects

Libraries desiring to extend their resources of information about alcohol could easily do so by indexing references to works on other social questions treating alcohol collaterally. As a rule the information which these books contain is first-hand and therefore especially valuable. Among books of this kind which are probably familiar to all of you may be mentioned several of Dr. Steiner's, such as "The Immigration Tide: Its Ebb and Flow;" Prof. E. A. Ross' "Old World in the New," all of which discuss drink in relation to the immigrant. Peter Roberts' books on the immigrant touch this relation at several points.

Healy's "Individual Delinquent," Mrs. Schoff's "The Wayward Child," Louise DeKoven Brown's "Safeguards for the City Youth," the Sage Foundation studies of "Boyhood and Lawlessness" and "The Neglected Girl," Mangold's "Child Welfare," are examples of current social service books which contribute valuable information as to the part drink plays in the home or community environment in sending boys and girls astray.

In another group of books the reports of the vice commissions, or such books as Edwards' on "Public Recreation" indicate both the extent to which drink in connection with amusements is a demoralizing social factor, and the change that needs to be made in providing opportunity for wholesome and healthful amusement and recreation.

"One More Chance," by McBrayne and

Ramsey, an account of the probation system in Massachusetts, is, for example, a book of intense human interest which points repeatedly the problem of drink interwoven with the problem of the offender against social order.

Conklin's "Heredity and Environment" and Guyer's "How to Be Well-Born" and other popular biological works discuss the relation of alcohol to heredity in the light of modern biological knowledge and actual experimentation.

The Life Extension Institute's volume, "How to Keep Well," has an important section devoted to alcohol in its health aspects. . .

Popular Books on Alcohol

For the reasons already stated, not much of our current popular literature dealing solely with alcohol is written by technical scientists. It has remained for others to take the facts and put them into a form that will be intelligible and practical for the average reader. Some of the books thus prepared will be found indicated on the printed list.* This does not mean, however, that the books are written without knowledge. Consultation is often had with experts who, so far as the public is concerned, prefer to confine themselves to ascertaining the facts, leaving it to others to popularize them. There are physicians among us who are cultivating the art of putting technical information into terms that the average man can understand. Practically all of the books named on this list have been written by men and women who have a wide acquaintance with the alcohol question and are disposed both to weigh evidence carefully and to present it fairly. This list is not exclusive of other good books, but it was made up with a view to suggesting the books which on the whole would give the average public library reader reliable information on all phases of the liquor question in not too technical a form.

Works on Legislative Aspects of the Question

Recent books dealing with the discussion of legislative measures dealing with alcohol are few. Just at this moment the world appears to be too busy acting to spend very much time in writing books on legislation. Some of those indicated on the list discuss, however, the various legislative measures that have been taken

and the underlying principles. Judge Artman's "Legalized Outlaw" brings together decisions against the liquor traffic in the United States up to 1908. The yearbooks issued by several of the temperance organizations show the legislative changes from year to year. The results of prohibition in the various states are for the most part published as yet only in pamphlet and leaflet form. One of these days somebody will sit down with the rapidly accumulating data, will sift the statistics and will be able to give us an orderly and dependable account of results up-to-date. We have such accounts of the earlier prohibition period which began before the Civil War and closed after the war. Dorchester in "The Liquor Problem in All Ages," Judge Pitman in "Alcohol and the State," and others who were observant contemporaries have told at length the story of that period. Mr. Koren in his *Atlantic Monthly* articles and his book, "Alcohol and Society," has ostensibly summarized the story of the period, but has related only a part of it.

Books of Questionable Authority

The book of Mr. Koren is one of another class of literature on the alcohol question which has come into being within the past few years. Often these books are written by authors of literary ability. Sometimes they are published by high class publishing houses. They are advertised as written by authors of special knowledge unbiased and unprejudiced. Many of them are today on the shelves of the libraries. One such book, for example, appeared a few years ago entitled "Alcohol: The Sanction for Its Use. Scientifically Established and Popularly Expounded by a Physiologist." The book was exactly what the title implied, an apology for alcohol. It bore the imprint of one of our best publishing houses. The author was announced as a famous physiologist. It contained an imposing list of authors on the alcohol question which was a wholly ornamental bibliography. The text of the book was pure assertion without proofs, or references were inserted at points which needed no support. . .

Diligent inquiry as to the author and his fitness to speak as a "physiologist" finally elicited the information that he lived in a small village in Saxony, un-

known to even the local district physician; that for a short time after taking his degree he had been an assistant in histology, had practiced medicine less than six months, for fourteen months had been an assistant physician at a lunatic asylum, had endeavored unsuccessfully to get a position in several of the physiological, chemical and pathological laboratories in Germany and France, that "he styled himself 'a physiologist' when unable to produce evidence or personal physiological investigations," and a later investigation which he did make was accounted worthless by physiologists.

Yet this book has been advertised by its American publishers as authoritative, and doubtless is on many library shelves.

Another author whose book appears in some libraries as the work of an Austrian scientist, justifying the use of alcoholic drinks, especially wine and beer, when in this country eight years ago was a member of a wealthy brewing firm—an expert undoubtedly in the scientific processes involved in beer-making, but hardly to be reckoned as a disinterested writer on the subject of alcohol. His work on the use of alcoholic beverages; published in Europe, not only received no favorable comment from European medical journals, but was sharply criticized by original experimenters. Professor von Gruetzner of Tübingen University though not personally in sympathy with the abstinence policy declared that the book was "liable to do much more harm than good," and that its advice that young men train themselves to be able to take alcohol even heavily at times without losing control of themselves was "preposterous and worthy of condemnation."

Liquor Literary Bureaus

The liberty of any honest author to the right to state his opinions or conclusions concerning the use of alcoholic drinks or the public methods of dealing with them must certainly be conceded. It is a well-known fact, however, that certain of the liquor organizations have literary bureaus whose business it is to put out books and pamphlets that will favor the use of intoxicants and oppose radical legislative measures. Some of these works go out boldly under their imprint such as Monahan's Text-Book of True Temperance, and the Yearbook of the United States Brewers' Association. Sometimes

the works go out under disguise to the mental confusion of the reader. A brilliantly written book when appearing under the author's own name, if the author's connection with a liquor literary bureau is not known to the reader, places him at a disadvantage in estimating the weight to be placed upon the statements and arguments of the work.

Favorite disguises for pamphlets and leaflets are published under the imprint of the "Personal Liberty League" and "Merchants' and Manufacturers' Associations." These when investigated have repeatedly proved to be associations of persons either in the liquor business or of allied financial interests. The Christian Liberty League publishes, to quote its own description, "an exposition of the liquor problem in the light of scripture, physiology, legislation and political economy." It is a defense of moderate drinking and advocates license.

The libraries in many parts of the country are receiving presentation copies of the publications openly issued by the liquor literary bureaus. Books like those of Starke and others are in many cases being furnished to the libraries by somebody free of cost. From a Vassar College professor came this statement not long ago which fairly describes the situation:

"Our college library has for some time been receiving books from the United States Brewers' Association and other organizations, all insidiously showing the evils of prohibition, of law-breaking, and the good effects of moderation and temperance in all things. It is all done so carefully that no one not having a trained eye would detect the origin of these works. Some have come with absolutely nothing to indicate their sources."

The professor adds that such books are not placed on the shelves.

Among the books of this kind found on library shelves have been the following:

Wasson: Prohibition, the Obstacle to Real Reform, and Religion and Drink. Andrae: Prohibition movement in Its Broader Bearings Upon Our Social, Commercial and Religious Liberties. The author is a brilliant writer who has been openly identified with one of the national liquor organizations. Debar: Prohibition—Relation to Temperance, Good Morals and Sound Government. Homan: Prohibition the Enemy of Temperance.

Thomann: Real and Imaginary Effects of Intemperance. The author was long connected with the United States Brewers' Association. Heinemann: The Rule of Not Too Much.

Books which bear the imprint of a liquor organization class themselves in the eyes of the reader. He knows that they will be opposed to any radical measures either as to the use or sale of alcohol.

The books favoring alcohol written by other authors, issued by well-known firms, are a more serious problem since the reader is not always in a position to judge of the truth or half-truth or falsity of their statements. The situation, then, so far as the libraries are concerned, appears to be about this:

(1) There is a large and growing literature on the alcohol question that endeavors to state fairly facts concerning alcoholic drinks and the liquor traffic. This is not to say that mistakes may not be made in them, but the authors have tried to present the case truthfully and have no personal interest in mis-stating the facts.

(2) There are some authors who honestly disagree with the abstinence and prohibition points of view. The value to be placed upon their conclusions will depend upon the accuracy with which they handle their data and their freedom from any connection with the liquor traffic.

(3) There is an also increasing group of books which are written for the purpose of opposing abstinence and radical methods of dealing with liquor. Some of these are openly published by liquor organizations. All of them manipulate facts in a way to lead to erroneous conclusions either by direct misstatements or by statements of half-truths only or by comparison of statistics which are not comparable, or by omitting certain essential factors in a situation.

Information Not Mis-Information

What are the libraries to do about it in the interests of public information?

Every library must settle for itself the question of its policy toward such books, but always, I believe, with due consideration of the function of the library to furnish information and not mis-information. In one of our large libraries whose catalogue I consulted not long ago, I found in several instances that the cata-

logue card indicated briefly the tenor of the book, as, "largely a defense of the use of beer," or "defends the strictly moderate drinker and advocates the license system as a restrictive measure."

In general, a book on the liquor question received by a library from an **unknown** source or using the catch-words of "true temperance," dwelling on the subject of "liberty" ought probably to be carefully examined as to its teachings.

But whatever may be your practice or decision as to listing these books favoring alcohol, the public has a right to expect that on the shelves of its libraries will be found whatever books are accessible, which present fairly and truthfully the facts for abstinence and concerning legislative methods of dealing with liquor.

It may be reasonably contended that the libraries have a special responsibility toward young people in this matter. Account must always be taken of the fact that much of our older standard literature glorifies and accentuates drinking. Upon the minds of younger readers, this drinking, often under circumstances that even some drinkers of today would not countenance, undoubtedly still has some influence toward acceptance of drinking customs as normal and right. We cannot change this literature, but we can establish the viewpoint of the youthful reader so that he will understand that these older references to drink represent old standards, as the wigs and frills of the men of the eighteenth century represent old types of dress, or as Aunt Jo's allowing Baby Rob (in *Little Men*) to suck the spoon from which Nat with the sore throat had taken a dose of cough syrup represents old standards of hygiene!

In other words, the glorification of drinking in standard literature can, in time, be rendered comparatively innocuous by knowledge of modern standards and the reasons for them.

But this makes imperative the deliberate choice of books for our libraries that will present the new viewpoint, that will so present the facts about alcohol in its relations to our modern conditions of living that a choice for or against the personal use of alcohol may be made in at least full knowledge of the conditions involved.

Some Things Great Britain is Learning

THE experiments of the British Board of Control of the Liquor Traffic in restricting the trade on certain sections have reduced convictions for drunkenness, increased industrial output, improved steadiness at work and promoted sobriety.

In watching the results of their work, the board has not confined itself to these familiar observations, but is opening up certain less well-traveled lines of observation such as the conditions exciting to drunkenness, the kinds of drink which cause it; the effects of mixed drinks, of drinking with meals as compared to drinking on an empty stomach, of concentrated drinking as compared with the same amount of alcohol consumed throughout the day.

Suggestive, though admittedly not final data, have been secured on some of these questions and were reported at the mid-summer meeting of the British Society for the Study of Inebriety by Lord D'Abernon, chairman of the Board of Control.*

The measures taken by the board appear to have reduced the conspicuous effects of drinking such as delirium tremens and drunkenness leading to arrest or conviction.

Delirium Tremens

The number of cases of delirium tremens is regarded by some authorities as a fairly reliable though indirect index of chronic alcoholism. A large proportion of all these cases in England comes under treatment in poor law infirmaries or prisons. Hence the returns from these institutions have been used by the Board of Control to determine the extent to which their restrictions upon drinking have reduced chronic alcoholism.

Restrictive orders went into effect November, 1915, in areas in East London and Woolwich. The returns from the poor infirmaries show that in the five months beginning December 1, 1915, there were 59 cases of delirium tremens dealt with as compared to 109 in the same period in 1914 and with 87 in 1913. This means "a reduction," said Lord D'Abernon, "in one case of nearly 50 per cent, and in the other of over 32 per cent." It occurred in spite of a large influx of

males into the district. The decrease was even more marked among women, "a prima facie proof that it was not due to withdrawing men of military age."

Similar evidence comes from other districts and from the prisons.

Drunkenness

Statistics are given for convictions for simple drunkenness and for drunkenness aggravated by and involved with other offenses in controlled areas of eight of the most important cities of England.

The convictions for simple drunkenness showed with some fluctuations a gradual tendency to decrease. The average number per four-week period for 24 weeks after the restrictions were introduced was 21,039, about 10 per cent less than the average for six preceding years. The cases of aggravated drunkenness showed at once a sharp decline after the restrictions went into effect, decreasing from 63,982 in 1914 to 23,738 in the very first period of 1915.

Just why "simple drunkenness" shows relatively less change than the drunkenness complicated with other offenses is not yet explained, but Lord D'Abernon suggests that it may partly be due to a reduction in chronic alcoholism.

Fermented Liquors Led to Drunkenness

In London, an inquiry was made as to what kinds of liquor led to drunkenness. Of 566 men, 229, or 40 per cent, had become intoxicated on beer, ale or stout; 10 per cent on spirits and beer mixed; 35 per cent on spirits alone, exclusive of rum; 8 per cent on rum; 4 per cent on other drinks. The remaining cases were unable to state what drink led them to intoxication.

These facts indicate, according to Lord D'Abernon, that spirits are less predominant as a cause of drunkenness than is usually claimed. Each kind of alcoholic drink produces intoxication, the proportion varying probably with the customs of the locality as to the kind of liquor used.

The fact that four out of every ten drunken men became intoxicated by some form of malt liquors alone is sufficient answer to the claims set forth by the brewers in this country that beer is not intoxicating.

*Reported in British Journal of Inebriety, October 1, 1916.

The idea that grief or trouble is a predominant cause of drunkenness received another blow from the inquiry made by the Control Board. This suggests the importance of similar inquiries elsewhere. Of 95 men convicted of drunkenness in Liverpool, 49, more than one-half, gave social drinking and treating as the cause of their condition. Practically the same proportion prevailed among the women.

Only 14 out of 95 men and 7 out of 21 women attributed their drinking to illness or grief.

Alcohol No Benefit to Workers

Tests were made with 20 workers in munition factories of the effects of a quantity of alcohol equivalent to that in a pint of 4 per cent beer given at the beginning of the working period.

The amount of work done was not appreciably increased or decreased in these tests. So far as they went, they showed that the idea that alcohol aids work had no foundation in these cases. As has usually been the case with such experiments, the persons engaged in hard muscular work who took the alcohol had a feeling of increased vigor and efficiency which led them to believe they were doing more and better work. The same impression, though less marked, prevailed among men doing less arduous work. This feeling of increased efficiency lasted about three hours, after which the man felt the need of another dose of alcohol. The results showed, as already indicated, that the **feeling** was all there was to it; the men really were not more efficient because of the drink. Dr. Sullivan, who conducted the tests, concluded that the effect of the alcohol on muscular energy resembled that of an anaesthetic more than that of a stimulant.

"It is probable," said Lord D'Abernon, "that in connection with muscular efficiency no worse habit could exist than that of starting alcohol in the morning and repeating the dose at frequent intervals during the day. It is this habit which has led to bar-loafing and the crowds of idle men outside public houses."

The results of the work of the Board or Control have already been such in producing a change for the better as regards intemperance in the areas affected that Lord D'Abernon declares:

"The phrase 'Men cannot be made sober by act of Parliament' is far from a correct statement of the truth. Recent experience convinces me that intemperance and excessive drinking are amenable to treatment. Better laws, better regulations, either restrictive or otherwise, can be relied on to produce vast improvement."

Sir William Collins, president of the British Society for the Study of Inebriety, commenting in a public address on the results following the Board of Control's restrictions, asked why their benefit should be denied other areas where munitions are handled or the military forces assembled.

"And again, why should such inestimable benefits be justifiable only for the successful prosecution of a war and not for the amelioration of mankind in piping times of peace?"

A New Personal Liberty Argument

"Is not the conclusion obvious that our dealing with alcohol must be akin to that of our dealing with any other drug or addiction or poison, since it is not the less baneful because it both saps the will power and also causes degeneration or destruction of the tissues? Noxious agencies which by habitual use enfeeble the will and imperil self-control should be brought under national and international regulations similar to those which the International Opium Convention contemplates in the case of drugs of addiction. Such legislation would not require repeal when other war emergency measures are allowed to lapse, since it is directed, not to the restriction of the freedom of the individual, but to the emancipation of his will power; for, as Mill maintained, 'the principle of freedom cannot require that a man should be free not to be free. It is not freedom to be allowed to alienate his freedom.'"

*

No ONE ever rises above his ideals. The larger the purpose is the larger the individual will be. While each individual is living in the world, at the same time he is building a world for himself. Man is the author of himself. If he does small things he becomes little and if he does large things he becomes larger. "Men enter the kingdom of perfect life through their own desires. The kingdom is never distant, never closed, never crowded."

The Effect of the Abolition of Vodka Upon Russian Industry

A national experiment like that of Russian prohibition of vodka has an outcropping of results in many directions. Necessarily, the war has changed many social conditions. The removal of so many men from civil life, the activity stimulated by war demands must be taken into some account in estimating the consequences of eliminating vodka at a stroke. Yet the investigations made in town and country reveal certain facts as to the advantages that cannot be gainsaid.

One of the most detailed studies of results has been that undertaken by the Statistical Bureau of the Society of Mill and Factory Owners of the Moscow district in connection with the Tchuproff Economical Society. The first furnished reliable statistics; the second insured accurate interpretation of them.

Details of the investigations have been related in several foreign periodicals and more fully by Prof. J. Y. Simpson in "The Self-Discovery of Russia."

Account was taken of the fact that owing to the mobilization for the war industrial conditions in the months studied (August, September and October, 1914) as compared with the same period in the previous years, were subject to variations and allowance made for these factors. The figures given hereafter for 1913 and 1914 refer in all cases to these three months.

Effect Upon Regularity at Work

The effects of intemperance upon industry were most apparent in the matter of non-appearance. The statistics of this investigation were compiled in a way to exclude all cases except those due to intemperance, illness (which is often a result of drinking), home circumstances, etc. Strikes, mobilization, leaves of absence, etc., were not included.

In 1913, to every 100 hours of normal working time there were 3.44 hours of non-appearance; in 1914, there were 2.79 hours. Here was a decrease in 1914 of 19 per cent due to the combined factor of temperance and short time in some factories.

In cases where the workers were employed for full time in both years, there was an improvement, in 1914, in this matter of regularity at work of 27 per cent.

Where the same number of workers in the same branch of industry was compared, there was a decrease of non-appearance of 2 per cent in the factories running for the normal length of time; of 9.4 per cent in those running on short time. The large decrease in the short-time factories was, of course, due to the fact that when they were running on short time workers were more likely to be regular in attendance to enable them to earn full wages.

Special Improvement in Men Workers

Especially noteworthy was the fact that there was a great decrease in the non-appearances of **men**—36.8 per cent. "Here," says Professor Simpson, "we trace the first beneficial effect of the prohibition. Further, the industries which suffered most from intemperance benefited most by temperance." A comparison of the non-appearances of men, women and boys and girls in factories working normally in both 1913 and 1914 showed that in some cases in 1914 there is "an increase of non-appearances among women, which goes to prove that the prohibition had no effect upon them. But the striking decrease among men in 1914 proves that their former non-appearances were mostly due to drink."

Improvement After Holidays and Pay-Days

Most non-appearances naturally occur after holidays and pay-days. In the period studied in 1913 the non-appearances after holidays constituted 23 per cent of the whole number; in 1914, only 18 per cent.

In 1913, non-appearances after pay-days occurred more frequently than after holidays; in 1914, they were almost equal.

Accidents After Holidays Decreased

There was no decrease of accidents in 1914 but even an increase, but this fact is explained by the employment of unskilled workers who took the places of those called into the army. But the number of accidents after holidays tended to decrease.

Smoother Factory Conditions

Fines are imposed in these industries for bad work, non-appearance and disorderly conduct. The total number of fines in 1914 decreased 42 per cent; fines for

bad work decreased 16 per cent; for non-appearances 62 per cent; for disorderly conduct 52 per cent.

"Thus we come to the conclusion," says Professor Simpson, "that the inner life of the mills and factories went on more smoothly after prohibition."

Taking everything into consideration, the productivity of five branches of industry was increased in 1914 0.72 per cent in the Moscow district and 0.89 per cent in the whole empire owing to sobriety and the consequent decrease on non-appearances. While this rate of increase seems low, it should be remembered that the percentage applies to the whole mass of workers, of which only 62 per cent were men, and it was the men, of course, who benefited most by sobriety.

A Close Study of Comparable Conditions

A more detailed investigation concerned the intensity of labor and the effect of sobriety upon it. Wages were chosen as a standard to measure the increase of intensity.

To eliminate all factors that would make figures incomparable, comparisons were made only with groups of workmen who (1) had worked during the same periods in 1913 and 1914; (2) had been paid piece-work wages on the same scale in both periods; (3) had done the same kind of work with the same material and machines.

Answers were received from 88 factories employing 158,782 workers, and the special reports related to 3,358 employees, of whom 2,646 were men and 712 women.

An Even Greater Improvement in Regularity

This investigation showed that the average of actual non-appearances per workman decreased 55 per cent in 1914. Workers with a high record of non-appearances had been chosen so that this marked decrease shows clearly the effect of greater sobriety after vodka was prohibited.

As already stated, in the first investigation covering workers of many classes under varied conditions there was a decrease of 19 per cent in the number of non-appearances per 100 hours of normal working time. In this second investigation of employees working under strictly comparable conditions this decrease amounted to 52 per cent in 1914.

Workmen Earned More

The result of such decrease was the better use of working time resulting in an average rise of 2.6 per cent in the productivity of the workers, and an average rise in piece-work wages of 4.4 per cent. "These two figures of increase (2.6 per cent and 4.4 per cent) enable us to determine **an increase of productivity of labor in 1914 for 3,358 workers amounting to 7 per cent.**" The productivity of male workers increased 8 per cent in 1914. In one group of 1,505 working men employed in normally working factories in both years the productivity increased 9 per cent.

Two-thirds of this increase appears in wages and only one-third in "better use of working-time," which seems to indicate that greater sobriety in the piece-worker brings him a wage advance proportionately greater than the effort which he puts forth.

Effect on Intensity of Effort

To ascertain the extent of increase in intensity of labor the 3,358 workers were divided into four groups according to the number of non-appearances in August-October, 1913. (1) Workmen without non-appearances in 1913; (2) workmen having from one to 30 hours of non-appearances; (3) workmen with from 31 to 100 hours of non-appearances, and (4) workmen with over 100 hours of non-appearance.

The first group, which had no non-appearances in 1913, had an average of 5.9 in 1914, due to illness. This average differs but little from that of all workers in 1914.

The average number of non-appearances in hours of the second group decreased from 14 to 11.7 (16 per cent); of the third group from 57.1 to 23.8 (58 per cent); of the fourth group from 175.9 to 4.2 (80 per cent).

These figures show that the workmen who suffered most from intemperance as evidenced in their greater number of non-appearances showed the most improvement under prohibition. In textile factories the non-appearances of these slackest workmen decreased "from an average of 159.7 hours for each workman during three months to an average of 11 hours; in metal foundries from 172.1 hours to 63.1 hours."

In all the four groups named above

there was an increase in the average amount earned per hour ranging from 20 per cent in the fourth group, the slackest, to 39, 45 and 64 per cent, respectively, in the first, second and third groups.

A careful study of all the statistics regarding textile and metal workers led to the conclusion that in normal conditions the lengthening of working time due to a decrease in non-appearances resulted in an increase of productivity of 0.5 per cent and of wages of 3.1 per cent, making a total increase of productivity of 3.5 per cent. Among metal workers this increase amounted to 11.1 per cent.

Prohibition made very little difference in the labor intensity of women. "In some cases there was even a decrease, which, as was very well explained in one of the reports, was due to the fact that women were unable to concentrate their minds on their work because of their anxiety for those at the front."

These figures probably do not represent the full increase in intensity of effort possible with greater sobriety. Several recent writers on Russia agree that the Russian naturally is not a keen worker. Professor Simpson in commenting on the results brought out by the investigation says:

"Owing to prohibition many workers wasted less of their working time and took almost full advantage of it.

"We may even suppose that the rise in wages due to longer working time was so considerable that workmen did not consider it necessary to increase their intensity of labor. Perhaps they reserved their strength purposely, contenting themselves with the increase of wages due to decrease of non-appearances. This is often seen in mills and factories, especially among those who receive low wages.

"If our supposition holds good, then we must admit that among Russian workmen there are great latent working powers which temperance has set free—powers which Russia will make use of when the war is over."

Official Details of Improvements Among Workers

Even more important than bare statistics were the vital testimonies by employers of the benefits from prohibition they themselves had witnessed.

"Workmen express joy over the abo-

lition and fear lest the sale of drink be reintroduced."

"Workmen show greater diligence, wages at the same valuation increased."

"Fines for spoiled materials, non-appearance and disorderly conduct reach the minimum."

"Abolition of drink raised the workman's budget, heightened the quality of work."

"There is a considerable decrease of illness."

"Formerly about one-third of our workmen had to get money in advance five or six days after pay-day. Since the closing of vodka shops this is of the rarest occurrences."

"Workmen began to regard their work more seriously. Productivity increased. They set store by every hour of their time and leave their work only in cases of dire necessity."

"Misunderstandings and disagreements between workers and managers are now almost unheard of."

"Accidents occur less frequently. Hooliganism, bad language and disorderly conduct are things of the past."

"Workmen show greater mental equilibrium. Quarrels in dwelling houses and family squabbles have disappeared."

"Workmen are more punctual; are well-dressed, well-shod, able to send more to their homes in the villages or take part of their earnings to the savings banks."

"Formerly 80 per cent of the workmen looked dazed and went about in a kind of stupor. Their homes lost all homeliness and were turned into centers of infection and misery. We could point out instances where parents carried off everything to the public house. Children were crowded together in cold, damp houses underground, while starvation and other unfavorable circumstances made them grow up into weak, delicate and prematurely embittered men and women. Now many workers have been able to add to their home comforts; fuller earnings enable them to take better rooms and to buy better food and clothing."

These reports come first-hand from government officials, from employers engaged in most diverse industries—silk cord makers; cloth manufacturers; cotton dying, wool weaving, machine embroidering concerns; makers of thread,

umbrellas, shawls, paper, sleeping-cars; from owners of foundries and other metal working establishments, saw-mills, ship-building yards, print-dye works, wood works and other forms of business.

The Investigators' Conclusions

The study, reports Professor Simpson, concludes in this strain:

"A few months ago, when the society was engaged in the investigation of

drunkenness, no one thought with certainty that prohibition would last any length of time, or felt sure that no exceptions would be made. This uncertainty is traceable in some of the reports.

"But now when almost a whole year has passed since temperance was enforced, we may firmly trust that prohibition will last on into the future and will cause the labor of the Russian people to develop and thrive."

* * *

Italian Wine Problems

THE statement is commonly made that Italy offers an example of comparative lack of injury from the consumption of wine. A account of the growth of alcoholism and its social results in Italy by Dr. Gina Lombroso-Ferrero was published in the JOURNAL in July.

Nor are individual effects lacking, according to the statement of Leonardo Bianchi, member of the Italian Chamber of Deputies, in an article in *Nuova Antologia*. Regarding the quantity of alcohol absorbed in a day by many Italians, he says:

"From an investigation begun two years ago in a private clinic by interrogating the patients, it was found that much greater quantities of wine were consumed than could be properly oxidated in the system, the result being serious injury to health by slow intoxication. Many of those who were questioned declared that it was usual for them to drink a bottle of wine at each of their two repasts, although this quantity did not, in most cases, produce any symptoms of inebriety, because they were so thoroughly habituated to the use of wine.

"Now, two bottles contain on an average from one and a half to two litres of wine, which, estimating the alcoholic contents at 12 per cent, gives from 150 to 200 grams of alcohol as the usual daily quantity, not taking account of the greater amount of wine commonly consumed on festival days. Such a quantity of alcohol, especially for those who do not perform hard work, is certainly toxic, for, according to the most thorough researches, it cannot be oxidated and hence is valueless as an aliment, circulation in the blood and exercising a deleterious influence upon the nervous

centers and the entire economy of the organism."

This is an amount of alcohol even larger than that used as a test of immoderate drinking by Dr. R. C. Cabot in studying the prevalence of such use among patients in the Massachusetts General Hospital. Of five nationalities thus studied, the Italians stood next to the highest (the Irish). Of the Italian patients, 30.8 per cent were classed as immoderate drinkers of whisky, beer or gin. Wines in this case were not considered.

Signor Bianchi urges that part of the ground and labor now given to vine-growing be devoted instead to grain which Italy has to import to the value of from \$60,000,000 to \$100,000,000 annually.

Thus Italy would gain a real food product and would keep at home money now sent abroad for wheat.

He suggests that at least no encouragement should be given to extending vine-growing, and the vines destroyed by the blight should not be replaced; that the export of raisins should be encouraged.

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AMONG the Italian immigrants the United States Immigration Commission found that the percentage in the hospitals suffering from alcoholism was low. It is possibly of interest in this connection to observe that among the South Italians only 8.7 per cent of the cases requiring assistance through the Associated Charities were due to neglect or bad habits of the breadwinner as against 20.9 per cent among the Irish, 14 per cent among the English and higher percentages of other nationalities.

Norway's First Total Abstinence Organizer

WHEN the first American Temperance Society was organized in Boston in the early part of 1826, to promote abstinence from distilled liquors, there was toddling about the home of a small shopkeeper in Stavenger, Norway, a little two-year-old boy who was destined to be the founder of a great national total abstinence society in that country, the first in all Scandinavia.

The growth of this boy from childhood to youth ran parallel with the growth of the idea in the American temperance societies, that to combat intemperance, abstinence from rum, beer, wine and cider is as necessary as abstinence from whisky and brandy.

The year that the Stavenger boy, Asbjørn Kloster, was 10 years old a temperance convention in Philadelphia voted down a proposition to include beer and wine in the temperance pledge, but three years later (1836) at a great convention in Saratoga, attended by prominent philanthropists, clergymen and representatives from many of the 8,000 American temperance societies then in operation, the total abstinence pledge was recommended.

The same year in the home town of the Norway boy, now approaching his 13th year, the first temperance society in Norway was organized on a little more liberal basis than the first ones in America, namely **moderation** in the use of spirits. At that time every householder in Norway was permitted to distill spirits for his own use and from the time the permission was given, 1816, to 1833, the consumption rose from 6.8 liters per capita to 16 liters.

Kloster's father was in very straitened circumstances and the boy helped in the store and used his spare time studying, for he was ambitious to get an education. Finally his father was obliged to close out his store and the son went to work for another storekeeper. But in this position, we are told, he gave up because it obliged him to sell spirits.

This indicated that he had come in touch with the growing opposition to spirits which was then developing from the idea of moderation to that of abstinence from distilled liquors. By 1841 the local societies formed on this basis

organized into a national society. The leader of this anti-spirits society, K. N. G. Andriesen, who was 15 years older than Kloster, received a liberal grant from the government to travel about the country combating the use of spirits and trying to reclaim drunkards.

Andriesen's following came mostly from the upper classes and produced little effect among the common people with whom Kloster afterwards worked. Andriesen's movement gained an impetus from reports of the American movement and from the visit of Robert Baird in 1837, with his published report of the same. Ten years after Baird's visit, when Andriesen's national society of abstainers from spirits was six years old and young Kloster, the future leader of a total abstinence society, was 24, public sentiment had reached a stage that resulted in the abolition of the home stills.

Also the same year, 1847, a very important event occurred in the life of Kloster. Three English Quakers, who were staying at that time in Stavenger, became acquainted with the young man and took an interest in him because of his keen intelligence, high principles and ambition for further educational advantages. They had friends connected with an agricultural school in Great Ayton, England, and they were able to make arrangements whereby the young Norwegian attended this school.

This brought him into Great Britain at the time of a widespread interest there in temperance. A great World's Temperance Congress had just been held in London the year before at which 31 representatives from America, among them the venerable Lyman Beecher and William Lloyd Garrison, were present.

Representatives from Ireland had told of the great work Father Mathew was doing. Large societies were at work in England and Scotland, and less advanced but growing organizations were combating intemperance in all the northern countries of Europe as far south as Germany and Poland, while in the United States, Neal Dow was canvassing Maine for a prohibition law for which he had secured the signatures of over 40,000 petitioners.

There was besides a large and growing

list of literature on the subject, among which was the Rush pamphlet that had first stirred the United States and Dr. Lyman Beecher's thrilling sermons, and a large number by English writers.

Kloster, coming into the country in which this interest from practically all of the civilized world had just centered, and into an institution controlled by the Friends whose opposition to liquor has always been pronounced, naturally received a good foundation of temperance education along with his other studies.

Having specialized in languages he opened a school on his return to Norway and taught for several years; but the evils of intemperance everywhere around him impelled him to enter upon a campaign on the basis that American workers had found 20 years before to be the only effectual one — total abstinence from all alcoholic liquors, beer, wine and cider included.

He organized in Stavanger in December, 1859, the first total abstinence society in Scandinavia, one that has continued to grow in numbers and educational activity and has been a preponderating influence in the present strong anti-alcohol sentiment of that country.

In the United States at this time interest in temperance was being overshadowed by the intense national feeling on the slavery question. William Lloyd Garrison was throwing himself with the fervor of martyrdom into the abolition of human slavery and thousands of the total abstaining young men of the country were soon to lose their influence forever on the battlefields of the Civil War.

In Norway no such calamity occurred to interfere with the progress of the movement against alcohol to which Kloster devoted the remainder of his life. He was an indefatigable worker and com-

bined lecturing, traveling, writing, with the publication of a paper which is still a living force in the hands of his successor.

For a time the higher circles held aloof from Kloster's total abstinence movement, which developed among the common people, but, as in all the other countries where societies representing the two views have existed together, that based upon total abstinence showed the greater vitality. It now has a large representation in the Norwegian Parliament and its president has been called into the cabinet partly, it is said, because of the importance of his constituency.

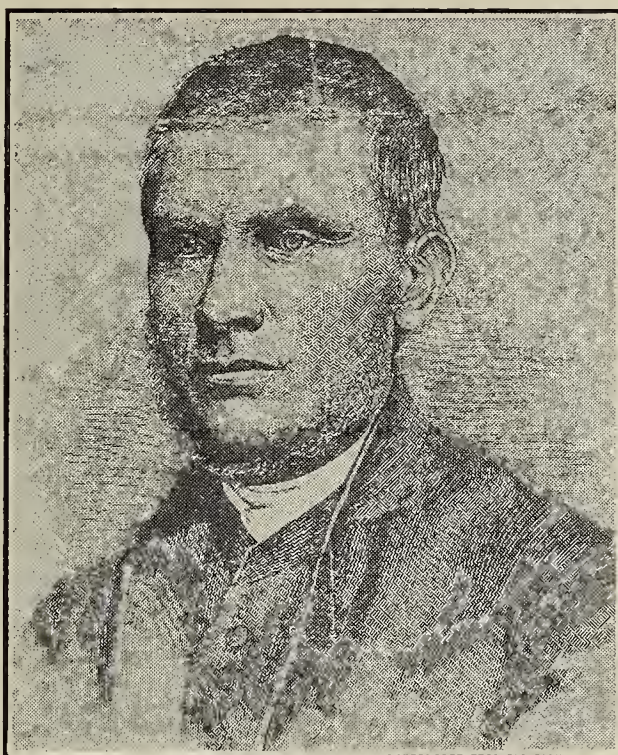
Kloster's unsparing devotion to his work brought him to the close of his labors prematurely and before the society he founded had reached a very large membership. But under his energetic and able successors, Nisson and Aarested, it had reached in 1908, at the time of the London Anti-Alcohol Congress, a membership of 130,000.

While it was the first and is by far the largest, it is not the only temperance society in Norway. The Good Templars,

the Blue Cross, the W. C. T. U. and others bring the total number of organized members of temperance societies in Norway (1914) to 280,000. It is the activity and educational work of these societies that has taken the country far on the way to freedom from alcohol.

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THERE is general recognition of the fact that it takes time to make over an inebriate. Appetite lingers, old cronies persist, the saloon remains, the "treat" still exists as a social institution. To overcome the cumulative effect of a man's whole past requires often not days, not weeks, not months, but years.—C. C. Stillman.



Asbjørn Kloster

What Alcohol Costs France

BY FREDERIC RIEMAN

Secretary de la Ligue Nationale Contre l'Alcoolisme, Paris

IT IS impossible to estimate completely the economic loss that alcohol merely in the form of distilled liquors annually entails upon our country. But a part of this loss can be approximately evaluated and such evaluation is the principal object of this study. We shall enumerate farther on the losses which, naturally, cannot be reduced to statistics.

Mr. Jules Rochard* was the first to study the question, and those who have taken it up later have hardly done more than repeat his conclusions. Let us, then, examine them. He estimated that the total annual loss entailed on France by alcohol amounted to 1,138,980,600 fr. (\$227,799,000) under the following heads:

Price of the alcohol consumed...	90,981,800
Working days lost	962,771,000
Expenses of treatment and stand- still	70,842,000
Expenses of treatment and non- employment for insanity	2,321,300
Suicide	3,170,000
Expense of crime	8,894,500
	<hr/>
	1,138,980,600

The Loss to Industry

I will not repeat in detail the calculations of Mr. Rochard, confining myself to reproducing the method by which he obtains the most important of these figures, the 962 millions which represent the waste caused by days lost from work.

"It is first of all necessary," writes Mr. Rochard, "to estimate the amount of alcohol necessary to produce in an adult a degree of intoxication sufficient to prevent him from working for a day. This quantity which one may regard as a unit of its kind I estimate, making generous allowance, at 20 centilitres which represents about half a liter of spirits, since, according to the last investigation made in the selling places of Paris, the average measure of spirits sold is from 37-50.

"Let us suppose now that a third of the total consumption is used by people who do not drink immoderately, there yet remains available for drunkenness 962,771 hectolitres of pure alcohol repre-

senting 481,385,500 lost working days, which amount, at 2 francs a day (which is a minimum), as I have shown elsewhere, to 962,771,000 francs."

I cannot accept the number of 960 millions as representative of days lost in consequence of drunkenness. This number appears to me to be much below the actual figure being based on a day's work valued at 2 francs (about 40 cents). Mr. Rochard himself regarded it as a minimum. In consequence of a general increase in the rates of wages, this minimum of 1886 has become inaccurate in 1916. It ought to be doubled, an average wage of 4 francs representing the present minimum.

Let us adopt, on the other hand, the figures of the eminent economist relative to the cost of suicides, insanity, hospital expenses and suppression of crime. They are also very much below the actual amounts. Thus only 14 per cent of the cases of insanity are attributed to alcoholism, though according to the recent works of Legrain and Magnan the proportion of alcoholic insane is one-third or one-half of the whole. It is only a matter of some millions and what alcohol really costs us is misery.

Expenditure for Distilled Liquors

We consider false the first figure given by our author. He estimates the cost of alcohol consumed in France at 90 millions (of francs) and to obtain this amount reasons as follows: "Our annual consumption is 1,444,156 hectolitres. The average price of the hectolitre has been for ten years about 63 fr. That makes an annual expense of 90,981,828 francs.

But to ascertain the sum that France spends annually in purchasing alcohol, we should not, it would seem, estimate the price of this commodity at some moment of the numerous transfers of ownership of which it is the object, which is what Mr. Rochard did in taking the wholesale price of pure alcohol. What is really paid by Frenchmen is what comes out of the pocket of the consumer at the moment that the alcohol finally becomes the property of the latter. From the

*Revue des Deux Mondes, April 15, 1886.

The Journal is indebted for the original manuscript of this article to Mr. George Eisler.

statistics of the Minister of Finance* we learn that France consumed in 1901, 1,634,000 hectolitres of alcohol at 100 per cent, rather more than four million hectolitres of spirits at 40 per cent. The liter contains about 40 "drinks" and in consumption at the saloon at 10 centimes a glass it mounts up for the drinker to a cost of 4 francs, at least. If the four million hectolitres of spirits consumed in 1901 had been drunk at the saloon, the total expense would have been 1,600,000,000 francs. But as a part of the alcohol is consumed at the home of the drinker, let us assume, to be generous, that the French consumer has paid on the average 3 francs for his liter of alcohol. One thus comes to the figure of 300 francs per hectolitre and of 1,200,000,000 francs for 4,000,000 hectolitres. I believe I have shown that this figure ought to be substituted for that of 90,000,000 francs adopted by Mr. Rochard.

That is not all. We know that tuberculosis alone cuts off annually 150,000 people in France and that alcoholism is considered by all who have studied the question as responsible for three-fourths of the cases of tuberculosis. From this cause alone, then, alcohol is responsible annually for more than 100,000 deaths. Valuing the lives at 4,000 francs each, the figure generally adopted by economists as the average value of human life, we find an annual loss of 400,000,000 fr.

Cost of Wasted Labor

Mr. Franck, in "Alcohol and Woman" (G. Carré, Editor, Paris, 1895), maintains that one-eighth of the population of France lives by alcohol, that is to say, by the death of the other seven-eighths. Here are the details of his figures:

Vine-growers	1,524,077
Cider growers	1,065,210
Blacksmiths, coopers, makers of furnishings	30,000
Makers of glasses and bottles for cafes	13,000
Drink industry, brewers, distillers, wholesalers, commercial travelers, etc.	90,000
Transportation of wines, beers, liquors	40,000
Lighting of cafes, taverns, hotels....	3,300
Keepers of hotels, cafes, lodgings and public houses	533,272
Retail food dealers selling wine and spirits	300,000
Home distillers	750,000
	<hr/>
	4,349,659

interested in the consumption of alcohol. Of this total, faithful to the principle dealing only with distilled liquors, we will strike out the 2,500,000 wine and cider producers. But we shall raise to a million the number of home distillers which has greatly increased since 1895.

We thus reach the number of 2,000,000 which represents the number of French people supported wholly or partly by alcohol. It is reasonable to suppose that they work at least 300 days a year with an average daily wage of 3 francs. If only one-fifth of their work is engaged in the production, transportation and sale of alcohol—which is certainly not an exaggerated estimate—we find that these operations represent a total of 180 francs (\$36) per person. For 2,000,000 workers this represents an annual loss of 360,000,000 francs (\$72,000,000).

Let us recapitulate the losses which we have enumerated:

Price of the alcohol consumed....	1,200,000,000
Working days lost by drunkenness	1,930,000,000
Mortality from tuberculosis of alcoholic origin	400,000,000
Working days used in producing a poison	360,000,000
Expense of treatment and stand-stills	70,000,000
Expense of crime, suicide, etc....	10,000,000
	<hr/>
Total.....	3,960,000,000
	\$792,000,000

We thus reach with very moderate estimates a total of 3,960,000,000 francs (four billions, in round numbers).

Disease Losses

And this is only a part of the injury caused France because, among the economic losses due to alcoholism, there are some which are beyond all estimate. We have seen that the tuberculosis of alcoholic origin which has been investigated in recent years, the evil results of which are relatively understood, slays annually 100,000 French. But the other diseases have kept their secret on this point. We do not know of the deaths they cause how many are due to alcohol. Some years ago the eminent president of the relief committee of the Paris Municipal Council, M. Ambroise Rendu, proposed that the weekly municipal report should cease to be silent on the mortality of alcoholic origin. This would be an excellent innovation which in the belief of the majority of physicians would lead to astonishing revelations. At present we possess only

*See L'Alcool, May and October, 1912.

isolated facts. They are in accord and permit us to get a glimpse of a part of the truth. Such are the reductions of premium given by English life insurance companies to their abstinent policy-holders; the mortality tables by professions which impute an enormous coefficient of deaths to the trades traditionally concerned with liquor; certain facts observed relating to the descendants of families of drinkers.

Alcohol often slays by other weapons than tuberculosis, and thus again it costs humanity dear.

The expense of hospitals represents a high outlay. This outlay would certainly be more than doubled if one took into account the prodigious amount of care of the sick at home.

The time loss that intoxication causes produces an annual waste of nearly 2,000,000,000 francs. But no one can say how heavily the weakness and degeneracy of all sorts weighs upon national productivity. The alcoholic of adult age is a premature old man; his children will be exhausted before beginning to work. What profit can society receive from the labor of one subject to convulsions, an epileptic or idiot?

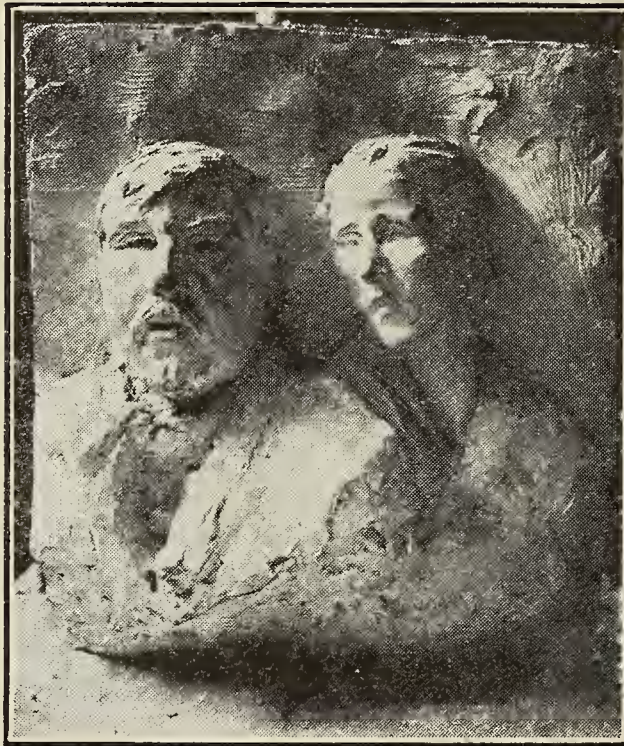
Alcohol causes the commission of crimes entailing expense for suppression which we cannot estimate. But the cost of the delinquent to society is not alone measured by that outlay. He does it injury by the victims which he makes, by the police he compels it to maintain, by the vices whose birth he provokes around him and by which he subsists, by the example which he sets.

And we have spoken only of the spirituous drinks, leaving out of account the wine and other fermented drinks. But physicians in hospitals in the large cities

have among their patients numerous sick persons who drink three, four and five liters of wine daily and whom this immoderate consumption has made alcoholic. At what fantastic figures should we arrive if we were to add to the billions that distilled drinks cost us those losses that the immoderate use of fermented liquors entail? It is incalculable, but in reality it ought to be calculable.

To the four billions of annual loss which we have analyzed above, it is fitting, then, in order to have the economic balance sheet of alcohol, to add an undetermined but colossal sum representative of the damage it occasions and upon which it is impossible to set a figure.

France pays about three and one-half billions in taxes; the suppression of this evil would have an effect much greater than the wiping out of all taxes. It is useless to insist upon the enormous impetus that such a result would give to the industry and commerce of this country. It would be the opening of an era of unheard-of prosperity, the victory of France in the economic wars that modern peoples wage, from which those emerge as victors who do not let themselves be



This bas-relief by Marie Apel called "Drink" portrays what drink does in France. It suggests the dull, sodden, almost brutalized face of the drunken husband and the thin, haggard face of the wife.

crushed by the general expenses of their production. Relieved of this deadly weight of more than four billions, we should regain the advantage given by our natural wealth and a geographical situation unique of all the world.

One's heart bleeds in thinking of what this great people could accomplish with several billions annually at its disposal. There is no doubt it would not only be within its own borders that the beneficent effects would be felt of curing this gnawing canker.

The Ruin of a Race in Hawaii

IT IS well known that the Hawaiians are naturally a very docile, amiable, hospitable people, but with marked inability to resist the lure of alcohol, and because of their poverty it is mostly the cheaper concoctions they imbibe, which produce madness and tend greatly to deeds of violence, as well as disease and death. These cheaper or so-called "rectified" liquors are sold mostly everywhere throughout the territory under the provisions of wholesale licenses in quart "dago-red" bottled or "square-face" gin.

Nor have the Hawaiians, among whom are men of stalwart character, living clean, sober lives and deeply interested in any movement for the welfare of their own people, been backward in their own efforts to secure governmental control of the liquor traffic in the interests of public welfare. Indeed, their past history furnishes examples unparalleled in this regard.

Prior to the coming of the white people to Hawaii, in the latter part of the eighteenth century, alcoholic liquors were unknown to the Hawaiians. The only thing that they had approximating an intoxicant was dried awa root, which, mixed with water, made a drink which was rather narcotic than intoxicating in its effects.

The native Hawaiians took to alcoholic liquor like ducks to water, however, and its effect upon them was like that of the microbe of a virulent disease in virgin soil. Almost immediately after the process of distilling became known as taught them by shipwrecked convicts escaped from Botany Bay, stills were in use all over the islands. It is related of Kamehameha I, that, although he was a temperate man, he became drunk upon one occasion and made such a fool of himself that he thereafter always used a wineglass upon which there was a mark from which to drink his liquor, filling it up to that mark and under no circumstances drinking any more on that occasion.

In 1818, about a year before his death, having become convinced that liquor was injuring his people, Kamehameha called a great council of all his chiefs on the island of Hawaii, at Kailua, causing a large grass council house to be built for the express purpose of holding the meet-

ing with his chiefs therein. Among other subjects he brought up for discussion was that of the manufacture and consumption of liquor. After due consideration with the chiefs he said to them:

"I command you every one to go home, each to your own district, and destroy every liquor still which you find. Distilling and drinking liquor are tabu from this time forward."

It is further related that the chiefs immediately returned home and carried out the king's orders. The council house was thereupon, by the king's orders, torn down so that it might not be used for any other purpose, as an indication of the king's opinion of the importance of the occasion. A year later, however, he died and was succeeded by his drunken son, who did not long survive, when Kaahumanu, his mother, as regent, again proclaimed and enforced prohibition. Kamehameha III, on ascending to the throne, did the same thing. In 1838 the law was again enacted, as well as in 1846. In later years, Kamehameha IV, a heavy drinker himself, upheld prohibition for his people. In 1865 the legislature proposed to repeal the prohibition law, but Kamehameha V sent for his ministers and the leaders in the legislature and said: "I will never sign the death warrant for my people." But in 1882 it was Kalakaua, whose own drinking habits were the cause of his undoing and hastened his death, who forced a repeal through the legislature. But though under Kalakaua, Liliuokalani, and the republic there were saloons, yet the number was limited to a few, there being not more than six or seven in the city of Honolulu, where now are 50 or more.

During all these years—when this interesting people were emerging from barbarism and were rapidly becoming civilized with good schools established, prosperous churches organized, and the rulers seeking to develop the welfare of their people and to protect the little kingdom from the many evils which assailed it—there is no more pathetic fact in all history than their struggle with the liquor traffic. Other nations were bound to victimize these weaker people of the Pacific islands—all for the sake of commercial

greed. France sent her man-of-war, and more than once landed an armed force and compelled the Kamehamehas, at the point of the bayonet, to permit the landing of French brandies and wines for commercial purposes. England also joined with France in this disgraceful demand. Once the Hawaiian flag went down and the Union Jack went up. For years and years these powerless chiefs were harried and bullied by the then two strongest Christian nations of the world. Indeed, once in the reign of Kamehameha III, so intense and acute had this struggle for self-preservation become, that a formal cession of the islands to the care of the United States was executed by the government, and the document was sent to Washington in case the French should take possession of Hawaii by force. An American and Hawaiian flag were sewed together, with the Stars and Stripes on top, with orders that the same should be hoisted in the palace yard the moment that the French landed their troops. When the Secretary of State, Daniel Webster, heard of the French persecution of Hawaiian chiefs, all on account of their desire to abolish their regulations of the liquor traffic, it is reported that Mr. Webster said: "I hope that the French will not take possession of Hawaii, but if they do under such circumstances as reported, they will be dislodged—if my advice is taken—if it takes the whole power of the United States to do it."

Again, at the time of the annexation of Hawaii to the United States, the people of these islands petitioned the federal government for such legislation as would prohibit opium, gambling, and the liquor traffic. Congress granted the prohibition of opium and gambling and also of the liquor traffic. This is a matter of record. It is so stated in the organic act and it was the intention of Congress that there should be no exception to that law. Unfortunately, however, in the committee appointed for final reference, a clause was inserted immediately following this provision, to-wit: "Except that which may be provided for by laws enacted by the government of the Territory of Hawaii." And so while the intention of the federal government at that time was to acquiesce with the wish of the Hawaiian people as formerly expressed in this regard, the clause referred to was inserted and has

become the death knell of thousands upon thousands of these helpless natives.

At the present time Hawaii is held in the grip of its powerful liquor dealers' association, backed up by the more powerful California wine interests, ready to pour forth their golden treasures at a moment's notice and to adopt any means, foul or fair, to promote their own sordid ends and to accomplish their greedy purposes. Politically and socially the territory is dominated by rum rule. The plebiscite in 1910 was a demonstration as well as a shocking revelation. At least \$60,000 were spent by the liquor forces to defeat the measure. This money was donated in part by the Honolulu brewery (whose manager more recently fled a fugitive from justice), assisted by the saloons, and in part by the mainland interests. It was a 3 to 1 victory for saloonism.

There are upward of 130 liquor establishments on the islands and the annual drink bill amounts to \$3,575,000. A large brewery in Honolulu, operated by white men, does a flourishing business. There are several distilleries, including one or two saké stills, controlled and run by Japanese. Cargoes of whisky, rum, dago-red and square-face gin are being shipped into the islands. The Hawaiian race is doomed. Out of an original population of 200,000 only 24,000 pure natives remain. The death rate is appalling.

There is a steady increase of murders and manslaughter cases in Hawaii out of all proportion with the population. The jails and penitentiary are full to overflowing. A former prison parole system has been enforced purposely to care for the overflow. The government is now building a larger territorial prison in the suburbs of Honolulu. The Boys' Reform School is crowded to its utmost capacity. There are 93 girls in the Girls' Reform School. The superintendent of both schools affirm that in most all cases the boys and girls are the children of drunken, helpless parents. The girls are an easy prey to designing men.

—From statements by Congressman Chas. H. Randall and Rev. J. W. Wadman of Hawaii, at a hearing before a subcommittee of the Committee on Territories, July 18, 1916, in behalf of a bill to prohibit the liquor traffic in Hawaii.

Germany's Instruction to Her Soldiers

A GLASS of beer costing 25 pfennigs (about 6 cents) has no more food value than a piece of cheese that could be bought for one pfennig. To call beer liquid bread is therefore wholly unjustifiable. Unfortunately, a large amount of money is spent in Germany for beer and the consequences are felt very heavily among the laboring classes. What the cost of a couple of glasses of beer a day means to a workingman's family is clearly seen in the better conditions of one receiving the same wages who spends none of it for alcoholic drinks.

It is certainly not a matter to rejoice over that more than three billions of marks are spent in Germany every year for alcoholic drinks. In round numbers this is four times as much as the annual cost of the army and the navy. . . .

In civil as well as military life alcohol appears as such an instigator of criminal deeds that one is well warranted in calling it the alcohol devil. It leads to murder and manslaughter, to brutal deeds of the worst kind, to lawlessness and disorders, and by no means least, to shocking deeds of immorality. And it prompts to such acts men who in the full possession of their senses would be quite incapable of such conduct. Men who at heart are well-intentioned may become criminals between today and tomorrow through intoxication. How many hopeful young soldiers have been deprived of liberty and honor and have lost the confidence of their officers and the esteem of their comrades through deeds committed in drunkenness. . . .

A compilation from military statistics shows that 88 per cent of the cases of insubordination are due to drunkenness, 75 per cent of the attacks upon officers, 35 per cent of the cases of disobedience. . . .

One may say that nearly all disorderly conduct, fighting and disturbance of public order are attributable to drink. And, what must be clearly pointed out is that it is usually beer that leads to so many evils; it is by no means the harmless drink so widely claimed. . . .

As a rule, the number of cases of punishment in a military body is to be taken as an indication of the discipline. A command in which it could be reported that no one became intoxicated would

mean remarkably good discipline. . . .

But only a small part of good discipline is represented by a small number of punishments. Constant readiness for service, presence of mind in emergencies, on the part of individual men, readiness to fight and the efficiency of the whole body are no longer endangered. The spirit and self-respect of the individual men are raised and in corresponding measure the confidence of the officers in the men. The duties are performed in a better spirit, and greater liberty is allowed when off duty because there is not the danger that drink will be misused. . .

Men who have chosen the military service as a profession have a still greater obligation to be sober under all conditions. They must remember that on them as future under-officers devolves a greater duty than on the rank and file, and that from the start it is their duty to set a good example to the men in sobriety and self-respect.

No soldier and no sailor should ever forget that at home as well as abroad, and especially abroad, the discipline of a command is judged by its behavior upon the streets, and that even single instances of drunkenness are sufficient to blacken the reputation of the whole body.

The military authorities have sought in many ways to check intemperance. The sale of spirits in the canteens has been greatly restricted; in many, as in the naval canteens, it is entirely prohibited, and cheap and agreeable substitute drinks are provided — particularly by automatic fountains or seltzer water; on the march, orders are given and attended to for the filling of the field flasks with non-alcoholic drinks. On battleships, especially in foreign ports where strong native liquors present a special alcohol danger, the flasks of those who are allowed land leave are filled with cold tea or coffee. In many cases physical exercises outside of the hours of duty are promoted as a measure against alcohol. . . .

More important than all service regulations is the growth of an understanding of the alcohol danger by every individual man. When it is possible to awaken an understanding of the situation in the masses so that every soldier and every

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The Other World War

THE JOURNAL contains this month a series of important articles on alcohol conditions in several countries. They present pictures of the enormity of the question of the progress being made in dealing with it, of opportunities and responsibilities for action. Russia is demonstrating that industry and social conditions profit by the absence of spirits, that improvement of economic conditions follows the putting away of drink habits; France is already tackling her spirits' waste portrayed by M. Riémain by the abolition of absinthe; Italy is finding physical and economic loss in her wine; Great Britain is slowly proving to herself that drink conditions can be improved by legislation; Norway demonstrates over a considerable period the advantages of even partial prohibition and of education and organization against alcohol. The condition of the native race in Hawaii due to the white man's drink is typical of what happened in many lands and is a disgrace to so-called Christian civilization. On the whole, the pictures, though still somber, show a world from which the burden of alcohol is slowly slipping away before the light of education and intelligent action.

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The Fatigue of the Nations

THE waste and cost of war do not all come out of the men in the trenches. As the fighting representatives of their respective nations they have to stand the shock of battle and death, discomfort, disease, and an interruption of all the orderly processes of normal life. But behind the soldiers in

this war are the workers at home. Lloyd-George is reported to have said that "the war has resolved itself into a conflict between the mechanics of Germany and Austria on one hand and the mechanics of Great Britain and France on the other."

"Mechanics" as never before, includes women as well as men. This means that virtually the whole populations of these countries are straining every nerve in this war. A period of national physical exhaustion when the war is over is inevitable, and must leave its impress for long upon national life. When both fathers and mothers of the present and the future are under such tension, the children cannot escape the results.

A committee appointed by the Minister of Munitions in Great Britain to deal with the health conditions of munition workers has issued reports, indicating, according to the *American Federationist*, that the health of the British worker is not on the whole being properly safeguarded. Here is part of the indictment:

"The 12-hour work day is far from unusual; many, both skilled and unskilled, work every day in the month; ordinary holidays are no longer observed; fortunate is the man or woman who lives near the works and is able to get a full night's rest; food has advanced in price as much as 40 per cent; occupational diseases have increased enormously with the manufacture of munitions; serious injuries from workshop accidents are common."

The writer on this question in the *American Federationist* feels keenly as unjust the reports which have gone out concerning drunkenness on the part of British workmen and of consequent slackness. Extracts from the reports of the committee mentioned above are cited in support of the view that industrial conditions are such as to promote drunkenness.

Every bit of credit deserved should be given the men and women at home in all countries who from patriotic motives are putting themselves completely at the service of their nations. But granting that some of the conditions under which they are working are bad and ought to be remedied, they no more constitute an excuse for drunkenness than the rigorous conditions in the trenches excuse the soldier for drunkenness. The man and woman

at home and the man in the field are working toward a common end. All will come to the end of war depleted in physical strength and endurance. As for the army, it is said that Great Britain never had an army so well cared for as the present one. Certainly the men and women at home should be equally well cared for.

But in the matter of drink the workman at home can find no reasonable excuse for drunkenness, other than custom and the mistaken idea that alcohol gives strength or removes fatigue. For the soldier in the field the amount of alcohol allowed is limited, and conspicuous drunkenness in the army would rightly be considered a failure of duty to the nation.

This is the real crux of the situation as regards drunkenness among British workmen. It is not a matter in which stress and over-exertion are to be cited as excuses. These are common to workers and to soldiers—a part of the penalty of war. Reports indicate that where the British government has placed restrictions on the sale of drink at home drunkenness has decreased.

The sympathy of the world will go out to workers in every capacity in their sacrifices and extra exertions. It means nations physically strained and weary for a long time to come. But we are fast passing the time when this can be considered an excuse for drunkenness. Whether the government is wise in continuing to allow constant access to drink is, of course, another phase of the question.

*

Wake Up Public Schools

DR. J. W. SCHERESCHEWSKY in a recent public health report estimates that every year the supposed 25 or 30 million industrial workers in the United States lose from sickness a total of 600,000 years of work or an economic loss of \$360,000,000, assuming the average pay to be \$50 per month.

Among the suggestions for preventing a part at least of this waste and loss is hygiene instruction in the public schools.

When we consider that about one-third of our school children later become industrial workers, says the *Medical Record*, the importance of including personal hygiene in every public school curriculum becomes evident.

For nearly 30 years the majority of the states have legally required the public

schools to give instruction in hygiene. The teaching in hygiene which has prevailed in a large proportion of the schools for a quarter of a century came in with the instruction as to alcohol and other narcotics. The forces which energetically pressed for the latter by the same acts carried in hygiene instruction at a time when little or no attention was being given to hygiene. How much of the present widespread interest in questions of personal and public hygiene is due to the preliminary work of the schools can never be known.

That there is room for improvement on the part of the schools there can be no manner of doubt. It is less than a decade since the supervisor of this instruction in a large Eastern city seriously questioned the necessity urged by two teachers of allowing 20 minutes a week instead of ten for teaching children in primary grades who sadly needed the most elemental instructions why and how to keep clean. At the same conference the excuse made was lack of time, although it was shown that the gentle arts of music and drawing were granted through the school course about twenty times as many hours as the health instruction essential to the welfare of every child.

If our schools are not giving the health instruction and training which public health demands, the situation is up to them. They have not only the right but the obligation to do it. The legal machinery is completed. It is for the school authorities now to grasp the opportunity and rise to the full measure of obligations for the health and the sobriety of the people of the nation.

*

Dr. Valentin Magnan

TO the recent deaths of Sir Victor Horsley and Prof. Elie Metchnikoff whose work, directly or indirectly, contributed strongly to the anti-alcohol movement, must now be added that of Dr. Valentin Magnan, honorary chief physician of the Sainte-Anne Insane Hospital in Paris, at the age of 81. Dr. Magnan carried on an energetic campaign against alcoholism which his experience as a specialist on mental disorders particularly qualified him to appreciate. As long ago as 1873, the Académie de Médecine awarded him the Civrieux prize for a memoir on this subject. Dr. Magnan

contributed for 40 years to the professional education of physicians in France and other countries who came to his clinic at Sainte-Anne for study and instruction in psychiatry.

*

Segments of a Vicious Circle

CAPTAIN EDGAR KING of the United States army, who has charge of military convicts, found many of them addicted to drugs and made a special effort to learn what had led the men into forming the habit. Many of them had good records as soldiers before they took up the habit, but from that point they rapidly degenerated into troublesome material and then into punishable offenders.

From extensive questioning Captain King learned that in most cases the habit started in one of three ways: From recommendations by prostitutes, by drug vendors, and by associates who were users. The prostitutes as a rule did not make the suggestion until the man complained of some ill feeling. Then the drug was suggested as a remedy. The vendor, of course, did not wait for such opportunity but supplied samples for trial. The other man, in some cases, made his suggestion before he had himself begun to experience the evil effects, while he was just beginning and was pleased with his experiment; in other cases he made it from unadulterated demoralization and degradation.

Captain King estimates that on the average one man in a company throughout the army is a drug user, some companies being free and some having more. But wherever he is, the user is a source of danger to his comrades; he becomes a center of infection.

The majority of the drug users coming under the observation of Captain King were mentally sub-normal, though some of them had made satisfactory records before their drug addiction, and as people of this class are less able to resist the jolts and jars of life, they suffer more from the contact. Indulgence in liquor and immorality added their stings, and with less fortitude for enduring pain and discomfort of body and mind, they offered a ready soil for the suggestion that the drug would make them feel better. To that extent an abnormal internal craving

co-operated with the external inducement.

In looking into the inferno which a study of drug addiction opens up, one begins to discern the links in an endless chain—a vicious circle with definite segments. The position of the army surgeon starts a point of contact with one of these segments, prostitution. War is its great opportunity and stimulus, which furnishes a stronger argument to the pacifist than the horrors of the bloody trench. Away from the restraints and interests of home, contamination from the evil-minded spreads, the liquor seller is alive to his opportunity and the procurer is in waiting. Then disease and drugs, both to spread out in all directions among civilians when the soldiers return home.

From syphilis, drugs and drink more subnormals to offer more limited resistance to more evil influences.

If this seems like exaggeration, let it be placed beside the estimate presented by the American Federation for Sex Hygiene: three billion dollars estimated as the cost of immorality and social disease, two billion the cost of alcoholic drinks and in comparison the one hundred million we spend for tea and coffee.

The vicious circle runs through other and fairer links than those mentioned. More and earlier marriages would do much to reduce the venereal peril. Statistics show that the married men in the army are much less given to patronizing prostitutes.

But early marriage meets an obstacle in the high cost of living, unwillingness to begin family life on a modest scale, undue love of display, social customs that make the economical young man unpopular, conditions in industry which lead to the continual importation of low priced labor and the entrance of women themselves into the industrial field competing at a lower price with men's labor, all combine to delay marriage and debar the sweetening influence of normal home life. Then to the home that does get a start is likely to come the antagonism of the saloon and the drinking club to mar its happiness, reduce its support and rob it of the charm, educational influence and character forming power it might otherwise have upon the young within it. Last year in Chicago there was one divorce to

(CONCLUDED ON PAGE 53)

Suggestions for Teaching and for Study Classes

1. Make a list of the sources from which data on the alcohol question may be obtained.

2. Topic for discussion: How Can Libraries Best Deal With Obvious Pro-Alcohol Publications?

3. To what books would you refer inquiries for information concerning:

- The scientific facts about alcohol.
- The social facts about alcohol.
- Conditions regarding alcohol in European countries.
- The question of personal abstinence.

4. What light does the experience of Great Britain and Russia during the war throw upon the relation of alcohol to industry?

5. Summarize the evidence from France, Great Britain and Italy as to the relation of the so-called lighter drinks—wine and beer—to intemperance.

6. Discussion: Can Legislation Increase Sobriety?

7. Factors in temperance progress in Scandinavia. (See also the JOURNAL, May, June, July, September.)

For Young People

1. Draw a circle. Separate it into segments and label them showing the proportion in which various drinks caused drunkenness in Great Britain. (Page 34.)

2. Draw lines of the proper proportionate length, and label them, showing the decrease in delirium tremens and drunkenness after restrictions were put upon liquor. (Page 34.)

3. Draw a circle. Indicate in it a segment by red crayon or pencil showing the proportion of men convicted of drunkenness who began to drink with the social glass of treating. (Page 35.)

4. Reduce to terms of American dollars the different items of loss due to drink in France given in francs, page 43.

5. Write out in your own words the story of the way liquors were forced upon the Hawaiians.

Problems

1. If there are 25,000,000 people at work in the United States and they each lose on the average nine days a year by sickness, how many days work will they lose in one year? How many years' work will this equal? Supposing one can earn

\$600 a year, how much would be lost in wages because of sickness in a year?

2. Of 566 men arrested for drunkenness 40 per cent became intoxicated on beer or ale or stout. How many men owed their drunkenness to this kind of alcoholic liquors?

3. In Russia after it became impossible for drinkers to get spirits to drink workers paid by the piece earned 4.4 per cent more than before. If a man earns \$1.00 a day and increased his earnings 4.4 per cent by sobriety, how much more would he earn in a month of 26 days? In a year of 300 days?

4. If a bottle of wine contains one quart, how many ounces does it contain? When this wine contains 12 per cent of alcohol, how many ounces of alcohol are there in a quart of wine?

Get a small bottle and put into it water to represent this amount of alcohol in a quart of wine.

How much alcohol would be consumed in a year if this amount is taken daily?

*

TECHNOLOGY STUDENTS TO CONSIDER ALCOHOL

PROVISION for consideration and discussion of some vital questions of life has been made this year for the students at the Massachusetts Institute of Technology by the Technology Christian Association. Among the topics place is made for the alcohol question.

The reason for this departure from the strictly professional preparation for engineering, as stated in the announcement, is, that "questions relating to idealism, to altruism, to religion, to morality, to character, are vital questions of life, upon which every man must think, concerning which he must have some conception, for they bear a fundamental relation to every decision he ever makes."

The discussion of the subjects chosen will be led by members of the faculty. Prof. Sedgwick opens with "The Recent Growth of Altruism." Other topics are: "The Forces That Hinder and Help Us in Our Dealings With Ourselves and With Our Fellowmen;" "Social Christianity;" "What Shall It Profit a Man?" "An Engineer's Faith," and "The Scientific Student's Belief."

Among New Books

THE OLD AND NEW DAYS IN RUSSIA

BY STEPHEN GRAHAM

RUSSIA was in a position of real difficulty. Her industrial villages, and those barracks of workmen and workwomen that have sprung up around great country factories were in such a state on Sundays and festivals that it was extremely unpleasant, and sometimes dangerous, for a well-dressed person to pass through them. They were infested with mobs of hooligans. Up and down the main street a dozen men and as many women might be found yelling, singing, screeching like demented creatures. No paper could ever dream of recording a tenth of the assaults, murders, robberies and obscenities that occurred in the industrial cities and villages and factory-barracks of Russia. They were unchronicled. The police all over the country knew that it was no use arresting drunkards and assaulters. If they arrested them there was no place to put them; they could only be reprimanded and released.

Despite large amounts of money voted for temperance aids drunkenness was strongly on the increase; and for that reason there was some doubt as to the advisability of giving another 10,000,000 rubles to the cause.

There were real natural forces fighting against drunkenness, and winning—the lighting up of personal ambition, the cinematograph, the evangelical movement. The Church of Russia, though it did not exclude the drunkard or the evil-doer, stood steadily for sobriety. It did not say it was a sin to drink, and, indeed, its own priests drank lustily—even to excess upon occasion—but it stood utterly against brutal drunkenness. . . .

It is a fact the vodka shop is closed. It is quiet in the industrial villages, in the "factories," and in the mining settlements. The old songs are sung; there is the old sociability, but it is over tea and around the samovar. In every province of Russia there has been an astonishing decrease in crime, in the breaking of heads, in immorality. The papers in the

great cities continually have to spare columns in their war-filled issues in order to give the facts of sobriety, and comment on them. Russia is greatly pleased with herself as a non-drinking nation. . . .

The people must be given personal ambition, art, literature, music. From my knowledge of the Russian peasantry, I know nothing that would so effectively combat drunkenness and hooliganism as the establishment of musical societies and bands in every village in the country. Music awakens the best soul of the Russian. . . .

Whatever happens, temperate Russia will have a great deal more driving power, will be more ambitious, and more able to get what it wants in the world than dear, melancholy, drunken Russia.—From *Russia and the World*.

*

WOMEN'S LOT IMPROVED BY ABOLITION OF VODKA

BY PROF. J. Y. SIMPSON

WHEN there was vodka women suffered most of all—drunkards could do what they liked at home. The family home had to accept what the policing of the streets would not permit there.

Women and children who were formerly suffering from beating, tortures and injuries can now see the light of hope and redemption.

Before, women were treated like animals; now they are treated like human beings.

A mother is quite safe now, and the children are merry and gentle.

Children don't see quarrels between their parents now, and don't hear bad language.

Women say, "War is not so bad as the government vodka shop."

When we had the sale of wine and vodka it was a terrible life for women and children—hunger, cold, lack of clothing, beatings, sometimes murder. You can hear everywhere, "We are preparing our husbands and sons for the war, but still it is much better than before, when we were suffering so much from drunkenness."

You cannot see a woman now with bark shoes, or children going to school in tatters.—Quotations from official Russia reports on peasant life in *The Self-Discovery of Russia*.

*

THE MIRACLE MEASURE

BY RICHARD WASHBURN CHILD

UPON the theory that the function of government is only to adjust the rights and obligations between man and man, and not to adjust the obligations of an individual to himself, and upon the theory that no restrictive measure is wise until a people are not only willing to legislate it but also substantially to live it, I went to Russia an opponent of any national prohibition. I promised myself to be an impartial observer, but I was filled with the expectation and perhaps the hope that I might take away supports for my beliefs.

I was routed.

The facts overwhelmed me; I cannot see how a national liquor dealers' and manufacturers' league could go to Russia and bring back an adverse report on national prohibition. Russia has been an example of what alcohol can do to gag the voice of progress and make the colors run in the fabric of social organism—her national prohibition is an example of how the abolition of alcohol will set the tide of life running toward regeneration—over night! . . .

I am not an advocate: I am only reporting my observations. Today in Russia, to the credit of prohibition, there stands—

An orderly mobilization.

A better trained and more efficient army.

A reduction of crime and immorality.

A lessening of pauperism.

A general public opinion in favor of prohibition and its maintenance.

An increase of industrial efficiency which manufacturers and government investigators estimate at not less than 30 per cent.

A decrease in the economic waste involved in the consumption of alcohol.

A more certain resource for government revenue.

A new era in thrift.

A new generation of youth free from the alcoholic appetite.

Better babies. . . .

On the side of alcohol I tried to find some one item of credit. . . .

Great Britain had her opportunity to try the experiment at the moment the conflict began; her government lacked the grit. Russia had the courage.—From *Potential Russia*.

*

Germany's Instructions to Her Soldiers

(CONCLUDED FROM PAGE 47)

sailor will exercise strict self-control in the matter of alcohol, and all who wear the king's coat will look upon it as a point of honor never to get intoxicated, and on the other hand, to regard it as a disgrace to his uniform and his company when one of his comrades gets intoxicated, or even appears to be, then discipline and order and true mental and physical vigor will prevail in our military forces for the success of the individual as well as for the whole service, and indeed for the whole German people.

*

Segments of a Vicious Circle

(CONCLUDED FROM PAGE 50)

every eight marriages and in a great majority of the cases cruelty aggravated by habitual drunkenness formed the basis of the charge.

It is perhaps well that different agencies for reform should hack away at the different links in this dark circle. Only as each widens its outlook to a proper estimation of the importance of the other evils will there be the necessary co-operation to secure speedy improvement.

*

My experience of the workshop, the street, the asylum, the jail, have given me exceptional opportunities of seeing the ravages of alcohol. My participation in many of the greatest labor movements of the present generation has enabled me to witness how drinking dissipates the social force, industrial energy and political strength of the people. Give up drink or give up hope of holding your places in the industrial world.—John Burns.

The Library Table

POTENTIAL RUSSIA. By Richard Washburn Child. New York: E. P. Dutton and Company. \$1.50 net.

It is a little known and understood country that the war and war writers are revealing to us in the wealth of new books on Russia. Mr. Child has well chosen his title for his suggestive study of what Russia is today, the forces stirring within her, but above all of what she may become. While the war is working awful wreckage in human life, has produced from homeless, hopeless refugees variously estimated at from eight to 14 million in number, it is nevertheless resulting also in a tremendous social and economic awakening, a trend toward organization such as has never before shown itself in an intensely individualistic country. America, the author believes, has much to gain and much helpful assistance to give in developing close relations with Russia in the days of growth before her.

Like all visitors to this great land, the author brings back a story of the enormous benefits of the Prohibition of vodka which are "making a new weave of the social and economic fabric."

THE SELF-DISCOVERY OF RUSSIA. By Prof. J. Y. Simpson. New York: George H. Doran Company.

Out of the East has long been threatened as something dark and to be feared—the coming of the Slav. The intermingling of peoples resulting from the war which can be likened in kind if not in degree only to what occurred during the Crusades is taking to Russia some western students of human nature and life who are bringing back to us pictures of Russia and the Russian that put both in a new light. Russia has yet much to do to get into step with the pace of the western nations in many respects, but it is growing increasingly apparent that she also has something to give for which the world civilization may be the richer.

Something of this appears in all the recent books on Russia, such as those by Stephen Graham, Richard Washburn Child and especially by Professor Simpson in his portrayal of the forces that are already at work shaping the new Russia. Possibly it was the courageous prohibition of vodka at the beginning of the war which sent so many inquirers to Russia to see what manner of land this might be that dared so venturesome an act. Prof. Simpson has studied the results in detail and his report upon prohibition because of these details is, perhaps, the most satisfying that has yet reached us.

He relates the facts others have published—diminution of crime, poverty, suicide, lawlessness, hooliganism, domestic wretchedness, increase in industrial efficiency, home comforts, savings. Even more significant for the future of Russia is the report that the local assemblies are better administered as to attendance,

order, justice, business-like methods. The graft and influence of the old vodka trade are gone.

It is even believed to have saved the day for national solidarity. The endurance and foresight and organization demanded by the serious issues of the war have been so great that one Russian diplomat is quoted as expressing the firm conviction that "If it had not been for this decisive measure our war would already have turned into a revolution, without speaking of our armies that would never have been able to keep up their gigantic retreat, keeping up through it all their wonderful spirit of self-sacrifice that has now become historical."

"In Russia," says Prof. Simpson, "the army and the nation are one, fused together in the fire of a common sacrifice."

Like Mr. Child, Prof. Simpson looks forward to the development of the future Russia as depending in no small degree upon the co-operation and help commercially and industrially by the western nations. He outlines the reasons why Russia should be untrammelled in its access to the Mediterranean and foresees the possibility that with Russia liberated and liberalized by contact with the outside world she may join forces in giving the nationalities of the near east a chance to develop their own lives and fortunes in peace and happiness. "Pan-Slavism" in the sense of a desire to build up a pan-Slavic cosmos to dominate and rule the world, Prof. Simpson quotes a Russian as saying, does not exist.

RUSSIA AND THE WORLD. By Stephen Graham. New York: MacMillan Company. \$2.00.

Written in the early months of the war which caught the author in the far east of the Russian empire, we have a picture of the effect of the war in those early months, and of the present and possible future relations of Russia to peoples under her guardianship and to the world in general. Especially illuminating are the sections on the Jews and the Poles and their possible future when the war is over. This account was written too soon after prohibition went into effect to give such detailed results as appear in Professor Simpson's volume. But the contrast between new and old conditions as to drink, even six months after the edict, is impressive.

POVERTY AND SOCIAL PROGRESS. By Maurice Parmelee. New York: MacMillan Company. \$1.75.

An exhaustive survey of poverty as to its causes and interrelation with other social problems leading to suggestions for its prevention by redistribution of property, income, increase of productivity, and the readjustment of society along democratic lines which would bring about a more equal distribution of wealth. The factor of intemperance as a prominent cause of poverty is recognized but

the author plays up well the favorite theory of a certain class of writers that intemperance is largely the result of poverty and will only be abolished effectively when economic and social conditions are changed. No one will deny that there is a vicious cycle of cause and effect here. The child who grows up in abject poverty may have his future economic status and his habits as regards drink set by those early conditions and in that sense his intemperance as an adult may be determined by poverty. A more fundamental question is, what brought his family into conditions of poverty in the first place. Repeated investigations have shown that the drink habit began with social custom in a much larger proportion of cases than as a result of misery. Russia has shown how poverty itself is relieved without any radical change in social conditions other than the abolition of the opportunity to indulge in drink. The average estimated expenditure of \$100 per year per family in the United States shows that the abolition of this waste would go a long way to raise the economic status of families above the poverty income level.

The removal of the social incentive to drink will not only reserve for family advantage the money now spent for it, but will release for productive labor energies now vitiated by drink and increase the mental clarity for the readjustment of those social and economic conditions which should lead to a clearing up of the poverty problem. The abolition of alcohol is not, therefore, a minor factor in dealing with poverty. It cuts the vicious cycle at an important point and by so much opens the way for larger measures.

THE MEASUREMENT OF INTELLIGENCE. By Lewis M. Terman. Boston: Houghton-Mifflin Company. \$1.50 net.

The demand for definiteness and precision which has been a growing characteristic of all scientific work for the last quarter of a century is manifested in the Binet-Simon measurement scale of intelligence. And the demand for definite standards of measurements in the field of the mind receives an added impetus from the growing attention given to the subject of feeble-mindedness in all its grades.

The Binet-Simon scale, however, has not been entirely satisfactory, partly for lack of a sufficiently detailed guide for using it and partly because of imperfections in the scale, especially in its application in this country. A revision has therefore been worked out at the Leland Stanford university, with the aid of graduate students, and the present book is the result. It deals, in untechnical language, with the problems and results of the system and gives descriptions of the tests and instructions for their use, beginning with those for three year olds and continuing year by year to the age of fourteen, after which tests are given for average adults and "superior" adults.

This volume is one of the Riverside Text books in Education edited by Prof. E. B. Cumberly, who says in the preface that the educational significance of the results to be obtained from careful measurements of the intelligence of children can hardly be overestimated. Questions relating to the choice of studies, vo-

cational guidance, schoolroom procedure, promotional schemes, the study of retardation of children in schools, juvenile delinquency and the proper handling of subnormals, as well as of the gifted children, are all helped to solution by this means.

BOOKS ON THE ALCOHOL QUESTION SUITABLE FOR PUBLIC LIBRARIES

The following list has been prepared by the educational Committee of The Allied Temperance Organizations of Massachusetts. It is not all inclusive, but suggests the books most likely to be read by the average reader.

ALCOHOL: HOW IT AFFECTS THE INDIVIDUAL, THE COMMUNITY, AND THE RACE. By Henry Smith Williams, M. D., LL.D. 1909.. The Century Company.

ALCOHOL AND THE HUMAN BODY. By Sir Victor Horsley, M. D., F. R. S., and Mary Sturge, M. D. Fifth Edition, 1916. Macmillan Company.

ANTI-ALCOHOL MOVEMENT IN EUROPE, THE. By Ernest Gordon. 1913. Fleming H. Revell Company.

COMPENDIUM OF TEMPERANCE TRUTH, A. By Edith Smith Davis, Litt. D. National Woman's Christian Temperance Union, Evanston, Ill. References.

DRINK AND BE SOBER. By Vance Thompson. 1915. Moffatt, Yard & Co.

HANDBOOK OF MODERN FACTS ABOUT ALCOHOL. By Cora Frances Stoddard. 1914. American Issue Publishing Company, Westerville, Ohio.

POCKET CYCLOPEDIA OF TEMPERANCE. An annual, issued by the Methodist Episcopal Temperance Society, Washington.

PROHIBITION ADVANCE IN ALL LANDS. By Guy Hayler. 1912. The American Issue Publishing Company, Westerville, Ohio.

SHALL I DRINK? By Joseph Henry Crooker, D. D. 1914. The Pilgrim Press.

SOCIAL WELFARE AND THE LIQUOR PROBLEM. By H. S. Warner. 2nd Edition. 1915. The Intercollegiate Prohibition Association, Chicago.

Information on Russian Prohibition Only the First Two Deal Solely with the Alcohol Question.

THE LIQUOR PROBLEM IN RUSSIA. By William E. Johnson. 1915. The American Issue Publishing Company, Westerville, Ohio.

RUSSIAN PROHIBITION. By Ernest Gordon. 1916. The American Issue Publishing Company, Westerville, Ohio.

SELF-DISCOVERY OF RUSSIA, THE. By Prof. J. Y. Simpson. 1916. Geo. H. Doran & Co.

POTENTIAL RUSSIA. By Richard Washburn Child. 1916. E. P. Dutton & Co.

Novels

ENEMY, THE. By The Chesters.

LITTLE SIR GALAHAD. By Phoebe Gray.

RIGHT OF WAY, THE. By Sir Gilbert Parker.

THE MAN WHO FORGOT. By James Hay, Jr.

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"From the point of view of facts, Mr. Johnson's book will undoubtedly take a high place in the ranks of the Anglo-American literature about Russia. The author makes a special study of the Russian liquor problem, and his study is fine, from the point of view of facts. Even in the Russian language there is scarcely such a comprehensive study of the history of the drink question in Russia. All who are interested in this question, which is such an unfortunate one for Russia, ought to read his book."
—The Editor of the *Ruskoye Slovo*.

AND A GERMAN AGREES WITH THE RUSSIAN:

"I admire the carefulness with which you have gathered the material for it. It is a most interesting work. There is no doubt that the anti-alcohol movement in Russia and the measures taken are of extraordinary importance."

PROFESSOR J. GONSER, of Berlin,
Secretary Internationale Vereinigung gegen den Missbrauch geistiger Getraenke.

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- PRICES—Single copies, 10c; per doz., 50c; per 100, \$2; per 1,000, \$11.50; per 5,000, \$47.50; per 10,000, \$80.

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3. Alcohol and Mental Work. By Dr. A. Smith.
 4. Attitude of the Socialist Party Toward the Alcohol Question. By Emil Vandervelde.
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- PRICES—Single copies, 10c; per doz., 60c; per 100, \$3; per 1,000, \$15; per 5,000, \$62.50; per 10,000, \$105.

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5. THE INFLUENCE OF ALCOHOL UPON THE FUNCTIONS OF THE BRAIN. By Rudolph Wlassak, M. D., Vienna. 16 pages.

6. THE INFLUENCE OF ALCOHOL UPON THE RACE. By Dr. Alfred Ploetz, Editor of Archiv für Rassen-und-Gesellschaftsbiologie, Berlin. 32 pages.

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10. INDUSTRIAL PHASES OF THE ALCOHOL QUESTION. By Alfred H. Stehr, M. D., Doctor of Political Economy, Magdeburg. 24 pages.

11. THE CAUSES OF ALCOHOLISM. By Dr. A. Cramer, Gottingen, and Prof. H. Vogt, Frankfurt. 16 pages.

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No. 3

If a flagon of alcohol were offered to a student of pharmacology to test as a curiosity, and he applied the standard methods of physiological experiment to it, he could but come to the conclusion that he was dealing with a more dangerous chemical than any now available in the whole range of materia medica, not second to opium or its derivatives as a destroyer of character, a disturber of function and a degenerator of tissue; he would be quite justified in advising the prohibition of its manufacture and use as a beverage.

---Dr. Haven Emerson, Health Commissioner, New York City.

The Program for Race Improvement

By E. L. TRANSEAU, BOSTON

THE masses of the men now fighting in the great European conflict are animated by devotion to an ideal. The triumph of their respective fatherlands appears to them so important to the progress of civilization that they stand ready to make if necessary the supreme sacrifice to attain it.

The men who framed the Constitution of the United States had a similar belief in the mission of this country and at no time in our subsequent history has there been a lack of equally devoted defenders.

We are strengthened in our belief in the mission of the United States as a great factor in the promotion of human progress by the evidence that it is attracting so many people from the other countries. It is drawing them away from the strong ties of fatherlands because it holds out the promise of better conditions.

The Nature of Old Migrations

History has much to say of the successive migrations of races over the face of Europe, but none of those waves compare in numbers to the yearly tide thrown upon the shores of this country. And therein lies a very grave danger which was not present, so far as we can read in history, in those European migrations. For the most part it was wild, virile warriors that overran in successive waves the older, settled people. It is very doubt-

ful if they brought with them so large a proportion of the mentally and physically defective as are now yearly coming to our shores as the numbers we are obliged to reject testify.

This was not the case in the earlier period of immigration in this country. When there were new lands in the West to be had almost for the asking, they drew sturdy farmers from Great Britain, Scandinavia and Germany. There was pioneer blood in their veins and it mingled with more of the same kind that went West from the large family circles of the earlier pioneers in the East.

Changes in Racial Factors

But that epoch is past. A new one is here in which the American farmer with five or six sturdy sons and as many healthy daughters is a thing almost unknown. Even the four children necessary for the maintenance of a race are a rarity in families of American stock a few generations old.

In this new epoch we are hearing from every side of the startling increase in the feeble-minded, the epileptic, the defective criminal, the alcoholic, the syphilitic, the insane. Urgent appeals are made for more and more institutions for the care of those who cannot care for themselves but who can and do reproduce their kind at double and treble the race of the

sounder stock. The statistical summary of these elements as presented by Prof. Michael F. Guyer in his new book, "Being Well Born," is fairly staggering:

"What is the meaning of our 366 hospitals for insane which cost us annually \$21,000,000; our 63 institutions for feeble-minded costing us over \$5,000,000; our 1,300 prisons maintained at a cost of more than \$13,000,000; our 1,500 hospitals whose annual maintenance requires at least \$30,000,000; our 115 schools or homes for deaf and dumb; our 2,500 almshouses with an annual expense account of \$20,000,000, and our 1,200 refuge homes costing annually several millions of dollars more? To say that we spend annually over \$100,000,000 on the custody of insane, feeble-minded, paupers, epileptics, deaf, blind and other charges, is expressing the situation very conservatively."

But that which should give us most concern is not the money cost, not the burden it throws upon the capable, making the cost of living higher, the road to success harder. The serious thing is that these classes are functioning so prominently as the breeding stock of this country.

"All available evidence," says Professor Guyer, "points to the fact that today the lower strata of society are far outbreeding the middle and higher with an almost negligible difference in death-rate, and just in the measure that these lower strata are innately inferior just in that degree must the race deteriorate."

A generation ago we were optimistic enough to believe that the opportunities which this country provides for individual advancement, the universal education, the fair wages, higher standards of living, freedom from gruelling taxation, could elevate all enfolded in it to the higher levels, but biology is correcting our over-optimism by revealing laws of heredity that outweigh environment.

It is not with gun and bomb alone, therefore, that America is to be defended for the fulfillment of her mission in elevating humanity, but by knowledge of and conformity with laws that determine whether a stock rises or falls in the scale of living.

Not all the questions involved have been answered, but enough have been elucidated to indicate some of the meas-

ures that may be pursued for improvement.

Biology apparently teaches us that certain types of the feeble-minded cannot be improved by environment. Something has been lost out of their branches of the stream of life that can never be restored. Science has applied the name determiners to an unknown something in the germ cell that develops in the new being such physical qualities as color of hair or of eyes, feature and form, or such mental traits as temper, vivacity, ability, weakness or firmness of will and other peculiarities that are found in the family histories descending in accordance with the Mendelian law.

Some Warnings from Biology

We have learned from biology that some at least of the qualities contributed by each of two mating cells do not fuse or blend in the new cell but continue distinct through all subsequent cell divisions appearing or failing to appear in mathematical order. Thus when yellow peas were crossed with green peas the offspring were not of a blended green and yellow color, but in the second generation all were yellow while in the third generation a fourth of the peas were yellow like the yellow parent and reproduced yellow offspring; one-fourth were green and reproduced green offspring; one-half were yellow; if yellow chanced to be the dominant quality in the cross, but reproduced a certain number of green. Thus the determiners for green will keep reappearing in the progeny of some of the yellow descendants, but in what proportion depends upon the mating, for each new mating begins again the same mathematical ratio between what is contributed by the father and what by the mother cells.

In human family histories individuals characterized by uncontrollable bursts of temper have been traced from generation to generation. In this case it is more probably the absence of a determiner for control that occurs and reoccurs in the splitting of the germ cells. Feeble-mindedness is believed to be in part the result of inheritance of germ cells lacking determiners for ability of some kind. Feeble-mindedness may be of all degrees from the state that results in the idiot to that of an individual so near normal that he or she passes for a normal per-

son and it is only in some of the children that the lack appears, like the green peas in the offspring of peas that were themselves yellow.

Multiplication of Feeble-Mindedness

Where the deficiency is extreme, as in the idiot, reproduction is likely to be checked; where it is moderate, and especially as lack of self-restraint is often part of the defect, reproduction is augmented. The records contain the account of the feeble-minded man who was the father of 19 defective children. In this case the mother was also defective, which intensified the inheritance. A feeble-minded woman appears in the records with 23 children. In one English workhouse 16 feeble-minded women produced 116 mentally defective children. A Massachusetts report says: "The prolific progeny of these women almost without exception are public charges from the date of their birth."

It is plain enough, therefore, that society must in self-defense take some steps to check the breeding of its defectives. The most effectual measure, it is thought, will be segregation or sterilization, or both, the first being more applicable to women, the latter to men.

These measures would affect only those defectives whose condition is strictly inherited.

What Parents Can Do Toward Producing Good Children

Experts estimate that about two-thirds of the feeble-minded are such by inheritance. The remaining third may be attributed to injuries at some stage of development. On this point Professor Guyer says:

"It is evident from our discussion of prenatal influences that not all of being well-born is concerned with heredity in its proper sense, since the unborn young may be influenced either directly or indirectly by environmental conditions which are in no sense products of heredity, although as far as the immediate child is concerned the result may be quite as disastrous where the influence is a banal one. As to the production of beneficial prenatal effects, while parents can do nothing toward modifying favorably such qualities as are predetermined in their germ-plasm, nevertheless they must come to realize that bad environment can wreck

good germ-plasm. They can see to it that they keep themselves in good physical condition by wholesome, temperate living, and thereby insure as far as possible healthy germ-cells for the conception, and good nutrition for the sustenance of their progeny. Their one sacred obligation to the immortal germ-plasm of which they are the trustees is to see that they hand it on with its maximal possibilities undimmed by innutrition, poisons or vice."

Alcohol as a Factor in Race Deterioration

Concerning the effects of poisons on the germ cells he says elsewhere: "We know, in fact, that such poisons as alcohol, lead and various drugs, and also the toxins of various diseases, do so affect (injuriously) germ cells."

Among the writers Dr. Guyer quotes in the evidence on this point are Dr. Mjöen concerning the enormous increase in idiots in Norway that came in with the home distillation of brandy and went with the withdrawal of the permission in 1835; the findings of Nicloux and Renault concerning the presence of alcohol in germinal tissue; and the animal experiments of Hodge, Laitinen and Stockard.

The program for the reduction of the feeble-minded, morons, epileptic, or other defectives must take account of the effects of alcohol upon these classes all the way after birth, lowering such abilities as they have, making dependents of those who without it might manage to be self-supporting, but particularly tending to increased reproduction. The charts giving the ancestry of defectives that have been investigated present with monotonous frequency the mating of alcoholic men with feeble-minded women. That a man whose mental qualities have been coarsened by alcohol should choose a wife with less care or discernment than a normal man is in line with the mass of testimony showing how slight alcoholization leads to the contraction of venereal diseases under circumstances from which the normal mental state would have revolted.

The study of the factors that lower the quality of the human stock shows that certain of the races are too far apart ethnologically to produce good crosses; the result is more like the crossing of species than of strains of the same species and shows in distinct inferiority to either par-

ent. Normally there is a repugnance to such unions, called sometimes race prejudice but which is rather natural instinct that should be heeded instead of combated. Here, too, alcohol appears to obliterate the finer feeling that normally would make such union distasteful.

A part of the problem of race betterment will be to determine from statistical study what races may and what ones may not intermarry without leading to deterioration, and the inauguration of such social measures as may be necessary to avoid the danger from this source. deterioration, and the inauguration of such social measures as may be necessary to avoid the danger from this source.

American Perils in Admitting Defectives

The most immediate and pressing danger of deterioration of American stock is undoubtedly that from the admission of defective strains through our insufficiently regulated immigration. While there are laws which forbid the admission of defectives, the facilities for examination at the American ports of entry are so inadequate that it is impossible when immigration is heavy to make the examinations necessary. "This lack of time and facilities for a thorough examination as to mental condition," says Dr. F. J. Warne in *The Tide of Immigration*, "is largely responsible for there being so many feeble-minded alien children in the public schools of New York. It accounts, also, in part, for the large number of alien inmates in the Elmira reformatory as well as for many alien members of our criminal class."

This admission of defective strains will certainly swamp or deteriorate our present people, unless something is done quickly, either through a more rigid weeding out or by checking its proportions. That these are alcohol-using people and furnish the best support to the alcohol traffic is an added danger, making so much the more difficult the solu-

tion of the alcohol problem, or even any sort of practical restriction in the sections of the country where they congregate. Those that are here should obviously not be left to the educational influences of the saloon, nor allowed to think that to become Americans they must graft the drinking habits of the saloonkeeper's friends upon those they brought with them.

There are other positive influences to be included in the program for race improvement. Pride in family stock can be cultivated by carefully prepared family records giving qualities, characteristics, habits, condition of health, and other details that would show when a contemplated marriage would be eugenically unsuitable. Certain hereditary qualities which would be undesirably intensified if contributed by both contracting parties might serve as a needed complement in a family stock in which they are absent. Proper pride in family ought to be a strong deterrent against eugenically bad marriages.

The family physician can render important aid in the way of valuable advice which if given in time might prevent painful mistakes. His certificate of freedom from venereal disease ought to be a requisite to the marriage license.

From beginning to end the whole eugenic program is one of education. Every element in it, knowledge of hereditary laws, segregation of the unfit, restriction of immigration, prevention of dangerous racial admixture, the abolition of customs and opportunities that lead to poison habits, improvement of environment, provision for proper social opportunities, the avoidance of social disease and social immorality, and pride in family stock are all important parts in a great educational effort that is as much a call of patriotism as is the call to relief work or to military preparedness.

* * *

THE influence of an alcoholic parent in home conditions that produce delinquency is one of the plainest facts observed in the study of criminalistics. . .

Mental defectives should receive the greatest protection from the influence of alcohol. Very frequently one comes to know of the disastrous effect which a small amount of alcohol may have upon the life of a feeble-minded person.

It must make the gods laugh to see this costly effort to treat alcoholics by police, court and sanitarium methods followed up by public opportunity and even suggestion to repeat the offense for which the arrest was made and the treatment given.—William J. Healy, M. D., in *The Individual Delinquent*.

Some Side Lights on Alcohol and Heredity
EFFECT OF ALCOHOL ON PIGEONS' EGGS

ANOTHER addition has been made to the evidence that alcohol affects germ cells. Oscar Riddle and Gardiner C. Bassett report in the *American Journal of Physiology* for Sept., 1916, results of the effects of alcohol upon the eggs of doves and pigeons. The alcohol was given by inhalation in such amounts that it was regularly present in the blood for a considerable part of the day. The weight of the eggs produced by the birds immediately preceding the alcoholization was ascertained and again after the alcohol was discontinued, for comparison

with the weight of those produced while under the effects of alcohol.

The results showed a very decided decrease in the size of the yolks produced under alcohol in six of the seven birds used and a slight decrease in those of the seventh bird, but this bird had been subjected to the alcohol for a shorter period.

The tables show a difference of about 234 grams between the average weights of the yolks before the alcohol period and those during this period, in favor of the normal state.

* * *

MORE GUINEA PIG EXPERIMENTS ON ALCOHOL AND HEREDITY

THE experiments as to the effects of alcohol on heredity in guinea pigs conducted by Dr. Charles R. Stockard have now gone on nearly six years. A summary of results was given in the *JOURNAL*, November, 1915. Dr. Stockard has since reported on matings of all kinds up to March 24, 1916, (*Interstate Medical Journal*, June, 1916). The experiments "demonstrated," he concludes, "for mammals that either of the germ cells combining to produce a new individual" may be experimentally injured or modified by alcohol in such a manner as not only to give rise to (abnormal) subnormal development, but the effects of the injury may be transmitted from generation to generation until an affected line actually fades out through degeneracy and sterility as a result of the transmitted condition."

Records are now given of 887 matings which produced 1,115 full-term young and 288 early abortions or negative results.

Results of Alcoholizing Mothers

From 95 matings where the father only was alcoholic only 57 full-term litters re-

sulted. This is only about half as good a record as the normal matings in which 83 per cent of the young lived. Almost all of the offspring were very excitable, nervous animals, four were paralyzed, three had serious eye deformities. No such conditions were found among the young of the normal animals.

Results of Alcoholizing Mothers

When the mother only was alcoholized, 50 per cent of the young survived as compared with 86 per cent from normal matings.

Progeny of Two Alcoholic Parents

When both parents were alcoholized, the proportion of living litters was very small (18 out of 42 matings). They contained but 27 young, 12 of whom (44 per cent) died soon after birth. Only 14 per cent of the 178 young born to control normal parents died.

The table below outlines the comparison of all alcoholic with all normal matings in the first generation.

The Second Generation

Animals of the first generation from an alcoholized parent when paired with

	Number matings.	No result.	Still-born litters.
Alcoholic	180	69 (38%)	21
Normal	123	26 (21%)	2
	Living Litters	Young dying soon after birth	Total Dead
Alcoholic	90 (50%)	77	125
Normal	95 (77%)	24	32
			Surviving Young
			93
			154

sulted consisting of 111 young. Over half of these (53 per cent) died at birth or soon after, leaving 47 per cent surviv-

ing. normal individuals showed three times as many still-born litters proportionally as normal animals. Three-quarters of their

still-born young had gross eye defects. Nearly one-half (47 per cent) of their living young died soon after birth. A fourth of those who lived had gross defects; more than half of them are nervous and excitable and even when mated to normal animals give "very poor quality of offspring if any at all."

When an animal from alcoholic parentage was mated with an alcoholic the results were very unfavorable, "in some ways worse than the records of mating between two alcoholic animals. Deformities were much more abundant among such offspring than from the directly alcoholized parents."

The III matings between animals whose parents were alcoholized "demonstrate conclusively that such individuals carry defective or abnormal germ cells which give rise to defective developmental products."

The degenerate offspring in the third generation "owe their sub-normal condition to the effects of the action of the alcohol treatment upon the germ cells

of their grandparents which have been transmitted to them through their parents."

The few individuals of this third generation which have survived "are generally weak and in many instances appear to be quite sterile even though paired with vigorous prolific normal mates."

"The males seem to be more injured by the treatment than the females. There is a larger proportion of degenerate, paralytic and grossly deformed individuals descended from alcoholized males than from the alcoholized females.

"The female offspring from alcoholic males are less viable and more frequently deformed than the male offspring.

"The male offspring from alcoholic females are inferior in quality to the female offspring."

"The experiments show," concludes Dr. Stockard, "the hereditary transmission through several generations of conditions resulting from an artificially induced change in the germ cells of one generation by treatment with alcohol."

* * *

Three Family Histories

COMPILED BY DR. ALFRED GORDON, PHILADELPHIA

Neurologist, Mt. Sinai, Northwestern General and Douglass Memorial Hospitals

IN collecting data concerning heredity, too great caution cannot be taken. No matter how careful one may be in obtaining information from the family, certain reservations must be made with regard to uncertainties and to the tendency to restraint in some members of such families in revealing matters concerning individual characteristics. Besides, not only alcohol, but also other factors may create pathological conditions so that it is sometimes difficult to ascertain which of them belongs to alcoholism with other serious morbid tendencies. It is possible, nevertheless, in some cases to obtain sufficiently precise information from a considerable number of observations.

The three series of pedigrees presented here* come from families about whom the most careful investigation with regard to other pathological conditions has been made. The information about the medical histories of several generations was obtained from the near and distant

relatives with whom a correspondence was kept up for many months. Disease, infection or intoxication other than alcohol could not be traced, as far as the statements of the members of the families could be relied upon. Every one of the surviving members of the last generation was submitted to a Wassermann test of the blood-serum and spinal fluid, and the results were negative. It appears that alcohol was the sole or at least the most conspicuous agent that created the abnormalities in several successive generations.

In the first family group covering four generations the great-grandfather was strongly alcoholic. One of his granddaughters, who was apparently normal, married a normal man who was, however, a first cousin. "With this single exception," says Dr. Gordon, "the remaining members of the large family can with reasonable accuracy trace the various defective characteristics to the parents' and grandparents' alcoholic intoxication."

In the three generations following the

*Interstate Medical Journal, June, 1916.

alcoholic great-grandfather there are 22 descendants. There are apparently only three normal children, two of whom were still under twelve years of age.

There were two miscarriages, three stillborn, one died at four, one developed tuberculosis and died at twelve, three were backward, two epileptic, one alcoholic and epileptic, one an eccentric alcoholic with a violent temper, one a somnambulist, two had St. Vitus dance or a tendency to it.

In the second family, alcoholism was present in the grandfather and one son. The latter had three children, of whom one died at six months in convulsions, one is epileptic and the third is a masturbator. The other children of the grandfather were not alcoholic but abnormal, and two of them were married and gave birth to several defective children. Of the fourteen descendants of the alcoholic grandfather only three were apparently normal. Besides the defects already named, there were two miscarriages, one epileptic, one vicious, one backward, one a somnambulist, one had a defective memory and a tendency to St. Vitus dance.

In the third family, the family tree is traced from the grandparents one of whom was profoundly alcoholic. Out of six children only one was normal, but he never married. Of the others, two married and gave birth to several defective children and one normal child.

Of the fifteen descendants of this alcoholic grandfather only two were normal. Three were still-born; one an alcoholic weakling; one defective both physically and mentally; two epileptic; two choreic; one a thief; one had a violent temper and could not keep a position; one was a somnambulist; one sexually vicious.

As already stated, the three families were most carefully investigated with a view to discovering all possible disease conditions; all the surviving members were tested and gave no evidence of the presence of syphilis. "It appears to be reasonably certain," says Dr. Gordon, "that alcoholism alone can be incriminated as a direct cause of the striking abnormalities traced in the several successive generations.

"Some of the offspring are still under observation, and every effort is being

made to prevent marriage of those who have reached adult age.

"The conclusion to which these exceptionally striking pedigrees lead, although small in number, is that alcoholized individuals procreate defective children. These, in their turn, if permitted, continue the chain of the pathological condition. One such family is capable of throwing into the community dozens of useless or dangerous individuals who, if capable of multiplying, will produce their like. If by depopulation is meant loss of individuals not only in a quantitative but also a qualitative sense, alcoholism is undoubtedly one of its causes."

*

THE STORY OF THE DACK FAMILY

IN 1815 William and Mary Dack and their young son, Samuel, came from Ireland and settled in Western Pennsylvania. William was a peculiar, silly old fellow who drank a great deal, stole sheep and other valuables. Mary, his wife, and also his cousin, was ignorant, quarrelsome, and would become angry at her husband and leave him for days at a time.

Mrs. Anna Wendt Finlayson, field worker of the Warren, Pa., State Hospital, has studied this family and reports upon it in Bulletin No. 10 of the Eugenics Record office. It is described as "a study in hereditary lack of emotional control."

Mrs. Finlayson got track of 754 descendants or persons who married descendants. She omitted from the record all persons dying under 20 years of age, all marrying into the family, or moved away. This left 153 persons.

No one was a distinctly good citizen. Forty are capable of controlling their emotions, though of a low order of intelligence. Four have not been a burden on society. Seventy-two were shiftless, illiterate, lacking in judgment, sexually irregular, heavy drinkers, possessed of quick and violent tempers, unable to control emotions. Forty-one have been either in insane asylums, penitentiaries, jails, or poorhouses. Those insane have some form of emotional insanity. They are quarrelsome, quick-tempered, violent, and given to sulking. The disposition to leave their marital mates is very marked.

Twenty-five were insane; 20 lazy and
(CONCLUDED ON PAGE 80)

The Chicago Municipal Court Studies of the Defective

“**A**MONG a self-governing people the social status is a first consideration. Universal suffrage demands a quality of citizenship which is menaced by the slum. Civic health calls for a constant fight against delinquency and all the factors which contribute toward it.”

With these words the report of the Municipal Court of Chicago begins its account of the undertaking of this court so to study the mental and physical condition of offenders brought before it, especially of “repeaters,” as to enable the judges to deal with them in the way productive of the largest possible benefit to the offender while protecting society against the offense.

In 1914 this Municipal Court established a psychopathic laboratory under the direction of Dr. William J. Hickson, an American physician, surgeon and neurologist, who had been trained in the psychopathic and neurological clinics of Zurich, Munich and Berlin.

Examination in this laboratory is not compulsory, but the offender rarely objects. Those who show clearly in court that they are abnormal in some way—by appearance, speech or nature of their offense—are sent to the laboratory for examination, the object being to find out what is their physical or mental condition and what is likely to be its future course. With this knowledge the judge may choose among several different methods of dealing with the case.

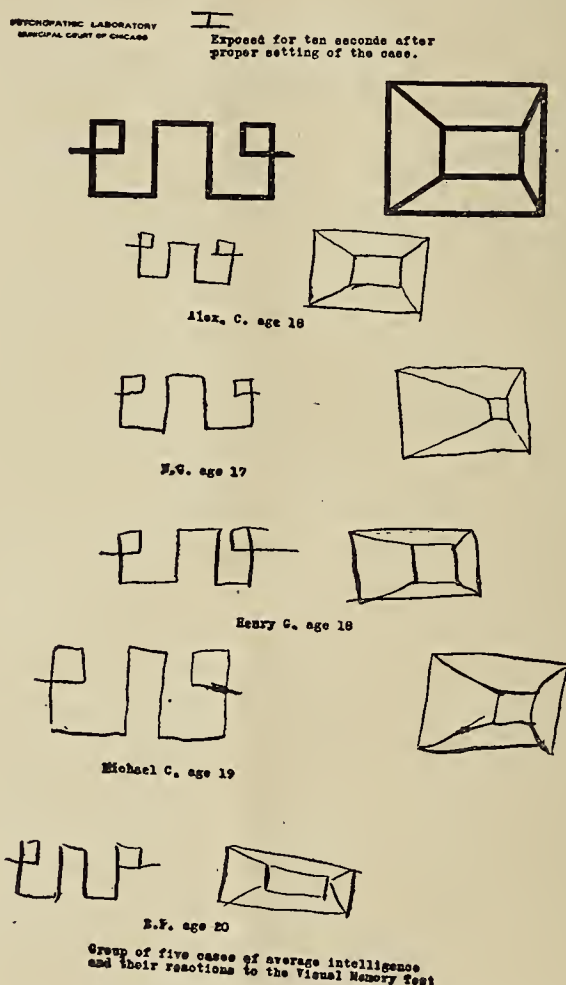
What the Tests Reveal

There are various tests used. A physical examination frequently reveals results explaining the offense in part as, for example, in the case of some offenders brought to the Domestic Relations' Court accused of laziness which was amply excusable owing to serious heart disease. Certain tests reveal mental disorders; others, varying degrees of feeble-mindedness.

“The mingling of these kinds of defectiveness is common,” says the report, “since the person of low intelligence is more likely than the normal minded to fall a victim of alcohol and narcotics.”

If this is true, the conclusion naturally follows that the ready access to alcohol afforded by social custom and the open

sale of alcoholic liquors increases the number of defective victims of liquor. It certainly increases their personal handicap as members of society. Even the “high-grade” feeble-minded has a mental capacity of only about eleven or twelve years of age with which to meet the complex problems of maturity. Add to that the impairment and inefficiency due to



42

The figures in heavy lines at the top were shown to the subjects for ten seconds. The subjects were then asked to draw the figures from memory.

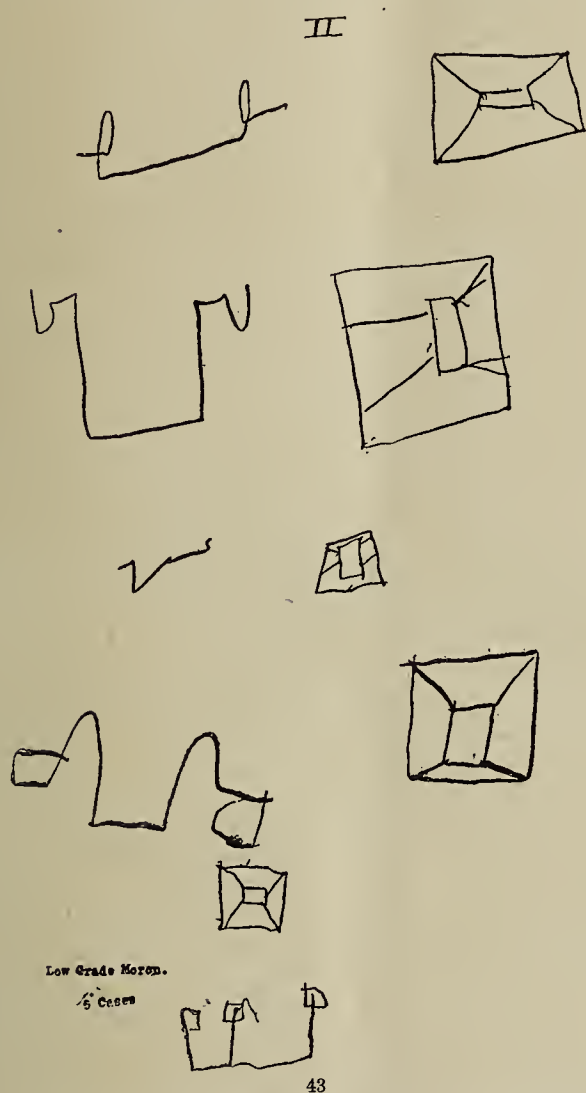
The drawings below were made by five persons of average intelligence.

drink and it becomes apparent that the presence of drink in a community distinctly adds to the burdens that any existing defectiveness imposes upon it. This is particularly true when the defective is born and reared in poverty and a degrading environment. The Chicago report while not alluding to the influence of drink under these circumstances describes the results of such condition which are known in many cases to be an accompaniment of the drink habit.

How the Feeble-Minded Fail

The feeble-minded child does not do

well at school, falls behind and so the parents consent to his entering industry. He is even less able to cope with industrial conditions, lacking concentration, efficient judgment, a sense of responsibility and the ambition that would take him over obstacles. He quickly forms doubtful associations because he is not up to the level of a vigorous social group,



Drawings made from memory by five feeble-minded persons.

fails repeatedly and is expected to fail and so is deprived of incentive to effort. He is likely to have the same appetites as the normal, but lacks the power of self-control and ability to recognize the consequences of wrong-doing.

Such a young person guarded and guided by a competent home may get through without serious trouble, but coming out of poverty and degradation (to which drink too often contributes) he is constantly liable, especially in the city, to succumb to some one or more of the many temptations which he meets.

Conditions Among Boys

Some of the statistics obtained by Dr. Hickson are of general interest.

In the Boys' Court, of 126 cases examined where the boys were of average intelligence about one-fourth (31) were victims of the form of insanity known as dementia praecox, five were alcoholics, twenty-two others had various defects, including in three instances the use of drugs.

Of 141 cases of "high-grade borderland sociopaths," twenty-four had dementia praecox, five were alcoholics, three others had alcoholism in connection with some other defect.

Among 728 cases of high-grade feeble-minded there were 100 having dementia praecox, twenty-one who were alcoholic. Of 151 middle-grade feeble-minded there were three alcoholics.

Drink, Defects, and Domestic Relations

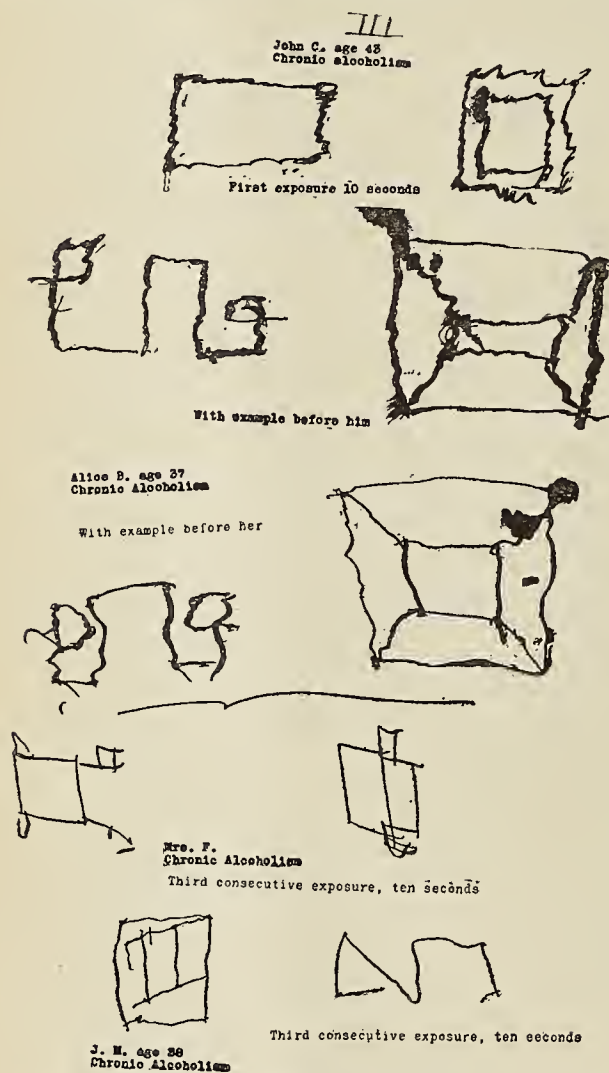
In the Domestic Relation's Court there were 696 cases thoroughly examined. Of these, 295, or 42.3 per cent, were chronic alcoholics. Seventy-five more had chronic alcoholism in addition to a definite mental disorder or weakness.

Of the 295 alcoholics practically all had an underlying disordered mental basis, and a few cases had a physical basis, such as diabetes, tuberculosis, locomotor ataxia, etc., where the cases were using alcohol in the idea of spurring their flagging energies. *It will be understood, of course, that this does not mean that all alcoholics are previously defective in some way. These were cases which were sent for examination because they showed signs of abnormality.*

Defective Memories for Things Seen

Among the tests used in the laboratory is one designed to ascertain the person's ability to remember and reproduce what he sees, called the visual memory test. The person is shown an outline drawing of a geometrical scroll and a box. He is permitted to look at the drawing for ten seconds and told that he will be asked to reproduce it from memory. It was found that each group of persons tested had characteristics of their own in reproducing the drawing. The victims of dementia praecox "drew the figure with finishing touches of their own, showing phantasy; the chronic alcoholics drew the figure with a coarse, irregular tremor;

the drug addict with a very fine line and tremor; all these groups drew it defectively. The person suffering from hysteria had still another drawing; the feeble-minded still another. The casual reader can see at a glance that these drawings almost amount to a mental finger-print method of identification of mental trouble."



45
Drawings by Four Alcoholics

The first pair made from memory; the second pair made by the same person with the copy before him.

The third pair drawn by a woman with copy before her. The fourth and fifth groups are the work of two persons at their third trial of the drawings, having seen them three times for ten seconds each time.

The results of some of the tests are reproduced in the cuts. The work done by the alcoholics was not the worst of the several groups. The drawings by the dementia praecox and hysteria patients showed, perhaps, the greatest inability to reproduce from memory what had been seen. But the alcoholics' results are sufficiently bad to show how much memory was impaired, especially in cases three and four, when the drawing represents the third trial, that is, the persons tested had seen the copy three times for ten seconds each time and yet

was unable to recall what they saw sufficiently to reproduce it exactly.

A practical question which has been raised before in this connection comes to mind. If the chronic alcoholic is unable to reproduce correctly what he sees, would his testimony have value in a case in law where it depended upon his recalling something he had witnessed, and would it not be advisable when free drinkers are summoned as witnesses to test in advance their ability to recall accurately what they claim to have seen?

*

Trade and Drink

THE Welfare Department of the Metropolitan Life Insurance Company has recently conducted an inquiry among large employers of labor to ascertain their attitude toward the use of drink among their employees. Among other returns received and reported at the National Conference of Charities and Corrections were replies from three large mail order corporations having about 25,000 employees, three department stores in three different cities having 15,000 employees, and a chain of retail stores having 3,600 employees.

The mail order corporations in two cases have no definite rules on the subject of the use of alcohol. One, however, has the following regulation:

Absence from work because of the use of liquors is cause for immediate dismissal. For the protection of minors and women working for us we feel it necessary to prohibit employees from patronizing saloons within eight blocks of our store. Violation of this rule will place the offender in a position where his services are no longer desirable.

This rule is given to new employees and is strictly enforced. The use of intoxicants during non-working hours, if it does not affect the individual's work, is not considered. In all three corporations a person who is shown to be, or admits that he is a user of alcohol to any extent, is not employed. This is determined by questioning the applicant, by general observation and in one case by physical examination of applicants for employment.

Two of the department stores have rules against the use of intoxicants during working hours. In the case of one store, if it is shown that alcohol is used by an employee outside of working hours, such knowledge will not directly affect his standing in the company, but will work against his advancement.

The Strength of Britain Memorial

SUSPENSION of the liquor traffic throughout the United Kingdom of Great Britain during the war is the object of a gigantic petition which is being prepared for presentation to the British government. The petition has already been signed by 1,000 of the most distinguished representatives of the "brain power of the nation." Prohibition, the petition states, would avert two grave dangers which are holding back the power of early victory—the wasting-power of alcohol and the imperiling of infant life. It would enable Great Britain "to strike the mightiest blow for freedom" of which she is capable, and would do away with a condition under which "the men in the trenches are betrayed by an enemy at home." The petition sets forth a number of weakening effects of alcohol upon the kingdom, and asks Parliament to demand a sacrifice for which, the signers believe, the nation is ready.

The remarkable list of signers of the petition includes representatives of the navy, army, munitions makers, scientists and health officers of the kingdom, leaders of finance and industry, educational leaders and social service workers. In the navy the signers include twenty-one admirals, four vice-admirals, and two rear-admirals. From the army nine generals, thirteen lieutenant-generals, twenty-four major-generals, four brigadier-generals, the chaplain general and inspector general, the chaplain of the famous "Anzacs" and many other officers have signed. The first 1,000 names include also those of 150 directors of munitions and fifteen principals of the ministry of munitions training schools. Representatives of literature and the arts number eighty, among them such names as Thomas Hardy, Robert Bridges, H. G. Wells, John Masefield, Arnold Bennett, Hall Caine, Eden Phillpotts, John Galsworthy, Sir Johnston Forbes-Robertson and several members of the Royal Academy. There are 100 leaders in finance and industry and 150 men prominent in public services. The 140 educational workers include Gilbert Murray and the master of Balliol College, Oxford. Sir William Crookes is among the thirty men of science, medicine and health, and seventy medical officers of health have

signed. On the list of forty-five social service workers are Mrs. Lloyd-George and Mrs. Walter Runciman, the Marchioness of Waterford and other peeresses, W. Bramwell Booth of the Salvation Army, and the heads of the Y. M. C. A. in England and Scotland.

The petition in full is as follows:

We, citizens of the United Kingdom, appeal to the government to put the nation on its full strength.

Two grave dangers stand before us, holding back the power of early victory and throwing a shadow over the vision of peace. One is the wasting power of alcohol; the other is the imperiling of infant life.

Among all the factors of weakness, these confront us with terrible vividness, and they lie within our own control. With the weakening power of alcohol removed, our national effort against the enemy would gather increased strength; with increased strength and more rapid supplies our losses in six campaigns would have been substantially reduced.

Now that the nation has followed the example of our allies in enrolling its full manhood, we appeal that we may range ourselves with our greatest allies and put on the whole armor of Britain. The power exerted by alcohol cuts through the efficiency of the nation; it weakens our fighting forces and must lengthen the war. These facts stand out concerning this powerful trade:

It hinders the army; it is the cause of grave delay with munitions; it keeps thousands of men from war work every day, and makes good, sober workmen second-rate.

It hampers the navy; it delays transports, places them at the mercy of submarines, slows down repairs, and congests the docks.

It threatens our mercantile marine; it has absorbed during the war between 60 and 70 million cubic feet of space, and it retards the building of ships to replace our losses.

It destroys our food supplies; in twenty months of war it consumed over 2,500,000 tons of food, with sugar enough to last the nation 80 days. It uses up more sugar than the army.

It wastes our financial strength; in the

first twenty months of war our people spent on alcohol £300,000,000.

It diverts the nation's strength; it uses 500,000 workers, 1,000,000 acres of land and 1,500,000 tons of coal a year; during the war it has involved the lifting and handling on road and rail of a weight equal to 50,000,000 tons.

It shatters our moral strength; its temptations to women involve grave danger to children and anxiety to thousands of soldiers.

The serious facts concerning the effects of drink on our forces have been known since the early days of the war, and military and naval officials appointed to investigate them pressed strongly for instant decision. During the eighteen months since then the government appointed the board of control, but its work, successful socially, has had little effect in the great industries on which our armies rely. Here the terrible truth of eighteen months ago is still terribly true; *the men in the trenches are betrayed by an enemy at home.* After all that has been done, the loss of time on the Clyde is reduced from 20 to 19½ per cent; men earning a good week's wage in half a week abandon work for drinking, and those men who give their best to the nation, striving nobly to undo the injury of their weaker comrades, are powerless in this cruel grip. *It is not drunkenness alone, however, but the constant sapping of men's energies by alcohol, that endangers our supplies of munitions.*

Over a year has passed since the king banished this source of national weakness from his household; since engineers, manufacturers of explosives, admirals, directors of naval equipment, urged the government to banish it from the nation; since the director of transports appealed for the withdrawal of all drink licenses for the sake of the army and navy; and since the Shipbuilders' Federation declared that "with the total abolition of drink the work would go with a swing, and you would get as fine work in our yards and shops as in the trenches." Yet the alcohol brake is still on our workshops.

As it is impossible to estimate the disastrous naval, military, social and economic consequences of alcohol in this crisis, so it is impossible to exaggerate the good results of its removal. In towns

under the control board, chiefs of police are glowing in their praise of peaceful towns and quiet streets at night, the London sessions following the adoption of the order were the shortest ever known, and several prisons have been closed since the board began its work. Yet, though the general drinking hours have been suddenly cut down to two short intervals a day, there has been no serious complaint, and we commend this as proof of the readiness of the people to accept war restrictions and to share in a common sacrifice.

We are convinced that the dangers confronting us arise from the sudden possession of abundant wages rather than from a lack of patriotic feeling; untrained in spending or in thrift, large numbers of our workers waste their reserves in drink. *The greatest good a government can render to its people is to strengthen their right purposes and weaken the power of their temptations, and there lies upon us now the duty of protecting our people from the temptation to drink away their earnings, and of protecting the state from the intolerable folly of high war wages turned to the advantage of our enemies.*

With the resources of the nation taxed to their utmost, the waste of £500,000 a day on alcohol is a fact of pitiful significance. *With their high wages our people dig pits of sorrow instead of building up reserves of power and independence;* children die faster of neglect, and a city missionary has received forty appeals from the trenches to look after wives "going wrong" through drink.

If it is said we need the revenue the state derives from alcohol, the answer lies in these things. No nation can make a profit from such a trade as this. But the fear for the revenue is shattered by the noble action of our allies and dominions; of Russia, which has prohibited vodka; of France, which has prohibited absinthe and the sale of spirits to women, soldiers and young people; and of Canada, where the sale of alcohol is rapidly disappearing, followed by the closing of prisons and the quickening up of life.

Russia, wanting strength and money too, has found both in prohibition. The saving power of her people has risen from shillings to pounds. The banks that received £180,000 in January before the war received in January, 1915, £5,600,-

ooo, and in January, 1916, £12,000,000. The industrial efficiency of Russia has increased by 30 per cent, and an increase of 10 per cent in our efficiency would replace our revenue from drink.

But against all considerations of financial sacrifice must be set the threatened loss of our mercantile supremacy at sea. Unless we can replace our lost ships our supremacy is doomed, and victory in the field must find us bereft of the chief factor of our national prosperity. The cargoes carried for the drink trade by our war-time ships have been about 2,000,000 tons, and the same cause that reduces our shipping reduces our capacity for repairing and replacing our lost carrying power at sea. The contemplation of these things while neutral nations are building fleets must give rise to the gravest apprehension.

More serious still is the peril of the child-life of the state. It is perishing faster than in times of peace. Our brave ally, France, with the enemy almost at the gates of Paris, won for itself the enduring distinction of the lowest infant death-rate ever recorded in its capital. What Paris can do can be done in our own towns if the same patriotic devotion be shown by our own people, and if all removable dangers to child-life be removed. *Chief among these dangers is alcohol.*

No source of weakness under our control is so widespread; none is more vital to the safety of the state in war and its welfare in peace. But the dangers of alcohol are tenfold now. The prevalence of venereal disease among one-tenth of our urban population, its special danger to child-life, and the anxiety with which we must contemplate its wide extension as one of the terrible gifts of peace, impose upon us an increasing responsibility. In 1912 over 270,000 working days were lost in the navy from this cause, and 216,000 days in the army; and the Royal Commission has urged that a decrease of drinking would be an important factor in the decrease of this far-reaching cause of national decay.

It is not to be questioned that in all these causes for apprehension alcohol is the greatest single factor that can be controlled. It is not to be questioned that the nation has readily approved the half-way step to prohibition that has already been taken. It is our profound conviction that the next step must be taken before the strength of Britain can be thrown effectively into the arena on which our liberties depend. No nation can be at full strength with such a factor in its midst.

We are no temperance reformers as such. *We stand for the great desire of all good people to strike the mightiest blow for freedom of which Britain is capable.* We support the demand for prohibition made to the government by its own investigators, and by the shipbuilders' deputation, with not a teetotaler among them, in March, 1915. Believing, in the Prime Minister's words, that "no sacrifice is too great when freedom and honor are at stake," and that rich and poor alike should bear it, we ask the government to suspend all drink licenses throughout the kingdom for the period of the war.

We believe a golden moment has arrived for our country; that, prepared for sacrifice by the example of the king and Lord Kitchener, the nation is ready for the natural step that France and Russia have already taken. *The suspension of the liquor traffic during the war, the conversion of the public-houses into houses of refreshment, will quicken up our civic and fighting populations, will raise a new fire of resolution in our people, and will give to millions the first opportunity they have ever had of breaking old habits of weakness and forming new habits of strength.*

We believe that in this, as in all other vital issues, there must be sympathy of purpose and unity of action between the allied nations; and we appeal to the government to be bold and trust our people, to be strong and follow our allies, to be worthy of the mighty destinies they hold in solemn trust.

* * *

Strong drink is manhood's foe. Whoever would be a pure, healthy, serviceable member of "the brotherhood of man" should abstain from it. Drink is an all-round enemy; it assails our physical, mental and spiritual powers, and the effects of its assault are disastrous.—Rev. Henry Carter.

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The art of making things happen is the art of seeing and picking out the events one wants to happen—and then advertising and picturing them to the people until they do.—Gerald Stanley Lee.

The Nation's Vital Resources

WHAT alcohol does to the people of the nation has come to be the supreme issue involved in dealing with the alcohol question. The JOURNAL presents this month several articles treating different aspects of this phase of the subject, from the standpoints of biology, experimental and medical investigations, health and social science.

The epoch-making memorial of Great Britain which is included in this number, strikes its strongest note in its appeal for defense of the people against the sapping and demoralizing effects of alcohol.

Here is the real crux of the whole question. Trade may bear up under the losses from alcohol. Food supplies may be kept full, albeit at extra cost. The war will not always last requiring the full strength of army and navy.

But the people are the nation. In so far as they are strong, clear-minded, buoyant, alert, clean-visioned, will the nation be strong. In so far as their energies are sapped, wits dulled, morals perverted, is the nation threatened with weakness and decay. This is the lesson of history. It is the lesson of the facts which this number of the JOURNAL presents.

Responsibility for Conduct

TWO problems are involved in the question of responsibility for conduct which is tossed back and forth between the poles of heredity and environment: (1) How far is the individual himself responsible for his actions since we now know that biologically his mental outfit is born with him, and (2) how far is society, that is, the forces outside of himself, in his home and other environment, responsible for the conduct which in time is distinctively his?

Biologically, the present evidence is that the child when born has all the nerve-cells he will ever possess. These he has inherited from his parents and preceding generations. But the connections, and especially the finer connections of these cells which will determine how the combined cells will act, are not all made at birth, and the way these connections are increased may be a very important factor in determining the individual's mode of life. As Professor Guyer says in "Being Well Born," "while the stage is all set and some of the main features of the performance are determined at the time of birth, considerable remains to be done toward fitting the parts together and working up the detail. Just how much is rigidly determined no one knows."

While it is true that children in some respects are strongly predisposed in one direction or another, so that from certain nerve and brain material only certain results can be obtained, it is the function of training and environment to seize upon those impulses whose connections are not determined and engender in the child the capacity for initiating and carrying out through his own will the impulses and the powers of self-restraint which tend to the highest good of humanity.

"Self-control and the will to do can be trained and crystallized into habit as well as can be any other activity," says Dr. Guyer. "It is a fact that one well-grounded in morals by habit will successfully resist subconscious impulses to wrong-doing even when suggested in the hypnotic state. Conduct is largely a matter of growth through actual performance."

In lower animals it is found that not all instincts come into expression at the same time. If, then, young animals are accustomed to certain ways of living or

acting before other instincts such as fear come into play, the result is to overcome or restrain the application of the later appearing instinct. This is even more conspicuous in human young. Hence it is of immense importance that whatever may be the hereditary possessions of the child, he should early be trained to those activities and forms of expression which are not anti-social; that as far as possible, good habits shall be established so early that when propensities for wrong habits begin to manifest themselves they will be inferior to the already established habits and so more easily restrained or overcome.

All this has a bearing on the drink habit. "It is clearly our duty," says Dr. Guyer, "to see that the expression of good traits is made possible. We must throw a sheltering screen of social environment around the young individual which will fend off wrong forms of incitement and chances for harmful expression and provide proper stimuli and afford opportunity for development of proper modes of expression."

The communities which forbid the sale of alcohol are taking this preventive measure for the establishment of wholesome habits as regards drink. The home life which is free from alcohol is doing the same. Especially is this important if there is any tendency to nervous defect or weakness or to the drink habit. The tendency may be there, but upon the training of the child and the environment with which he is surrounded will depend his own acts toward or away from the use of alcohol.

Even the star-fish has been trained to perform certain acts in a different way from the ordinary. The mere fact that alcohol has been a part of human customs for centuries does not render its abolition from them impossible. The drinker taking to drink because of some inherited nervous weakness cannot be wholly absolved from self-responsibility. "Beyond question," says Dr. Guyer, "different men have different degrees of capacity for mental and moral training. All cannot be held equally responsible ethically, but the lowermost limit of obligatory response to social and ethical demands necessary to rank one as within the pale of normal conduct is at such a level that anyone not an actual defective

can in a reasonably wholesome environment surmount it. All normal men are responsible for their conduct."

The phrase, "in a reasonably wholesome environment," puts a share of the responsibility for the drink habit squarely on the shoulders of parents and lawmakers. The drinking man may not wholly shove off on his ancestors responsibility for his course, but neither can society shrug its shoulders and say that heredity is wholly to blame, if it has left the child open to impressions that drinking is natural and normal, and has offered him no other convenient opportunity for social intercourse than the saloon, has implanted in him no principles of resolution and sturdy self-control.

*

When He Was With the Drink

THE "book of the unknown dead" is a record of the persons found dead or dying with no traces of identity, whose bodies at the morgue are unclaimed by relatives and who are buried in the potter's field. Before burial a very minute description is written of the appearance and clothing to help establish identity in case anyone comes after burial to inquire for lost ones. According to one mortuary district where hundreds of such cases are received every year, 90 per cent are unknown when received, but of these all but 10 per cent are identified within a few days and the majority of the remainder within a year.

"The dreary list," wrote a reporter who visited the gruesome place recently, "is a monument to the struggle of living, telling of poverty, failure, disease and sudden death." It tells also something more.

At the time of this reported visit a woman was there seeking a clue to a lost husband. She could not tell what he might have worn at the time for she was in the hospital. He was in the habit of going away and staying for two or three weeks, so she thought nothing of this last disappearance until he had been missing a month.

So the records were read to her. One was of a man about her husband's size, with a beard. "No," she said, "that could not be him for he was always clean shaven." But, the record added, "apparently clean shaven." "Oh, yes, not recently shaved. That would have been him when

he was with the drink. You see," she explained, "after he had been with the drink for a while he would forget and let it go."

Then the age, about 50. "That's him! That's him!" the wife wailed.

"But, my dear lady," objected the official, desiring to offer comfort where possible, "you said your husband was only forty."

"But when he was with the drink, he looked that old," she answered. "And his hair was getting grey. Yes, yes, it must be my man. If only I had tried to find him sooner; but how could I? I was in the hospital."

Here we have a glimpse of real life showing the physiological chain of cause and effect between that temporary banishment of restraint, claimed by certain alcohol advocates as beneficial at times, and that total disregard for appearance that made the man neglect to shave when he was "with the drink," a condition which his wife recognized as one of his characteristics.

His banishment of restraint by alcohol had grown until he was able to free himself from his family responsibility and stay away two or three weeks at a time. Needless to say, some one else had to look after that family support while he was away, and, unnecessary to add, his contribution must have been small when he returned.

The loosening of the tension of his life had gone further than his mind. It had reached his bones and muscles and tissues. He was prematurely aged and looked to be fifty when he was only forty, an age at which a man should be hale and hearty.

The liquor dealers would like to exterminate the drunkard. He is an advertisement of their business that they do not relish. They think it is the drunkard that keeps those troublesome temperance societies alive. If it were not for him there would be no cause for their existence. The trade would like to exterminate the drunkards quickly. But they cannot do it any more than they could destroy a forest by cutting out the old, unsightly trees. All of the others, from the newest seedling just out of the ground are progressing to the same stage. But a disease or condition that causes the

trees to decay prematurely may be combated.

The progressive effects of alcohol, from the first loosening of the tension that starts more or less silly talk to that which lets go care for personal appearance, for family support, for health, for life, for eternity, can be traced in the light of our present knowledge, without waiting for the final marks. There may be long years, to be sure, between the early social glass and the morgue, but the progress is as strictly according to law as the progress of decay in the trees of the forest, the law in the poisonous nature of alcohol which starts premature decay in man with the first loosening of normal tension. Mere living does not constitute life. The growing unsightliness of those alcoholic years, and the woman's tears over the grave in the potter's field, show how much more precious than life itself is the thing which was lost "when he was with the drink."

*

Duffy's Whisky Claims for Diabetes Repudiated

THE indefatigable "Duffy's" in its advocacy of its "Pure Malt Whisky" published an advertisement not long ago extolling its virtues in diabetes, and made the following statement:

Now comes the Rockefeller Institute with the statement that whisky has been used by them for several months with great success for diabetes—a more common disease than is generally supposed. It is more dangerous in youth than in old age because it inclines its victims to all sorts of diseases. Hence the importance of an absolutely pure medicinal product such as Duffy's Pure Malt Whisky to be used in connection with the diet your physician recommends. * * *

No claims are ever put forth for Duffy's Pure Malt Whisky that have not been proven in actual practice. either do unprejudiced physicians ever hesitate to recommend this valuable remedy to all those whose systems need building up.

A letter of inquiry as to the truth of the statement about the use of alcohol in diabetes by the Rockefeller Institute brought at once the following reply:

THE HOSPITAL OF THE ROCKEFELLER INSTITUTE

For Medical Research

66th Street and Avenue A, New York
Oct. 26, 1916.

Miss Cora Frances Stoddard,
Scientific Temperance Federation,
Boston, Massachusetts.

Dear Madam:—Only brief abstracts have thus far been published in medical journals

concerning our treatment of diabetes, which will be described in a monograph to appear within a few months. The mention of whisky you will find in the paper by myself in the *Journal of the American Medical Association*, of September 12, 1914. The use of whisky is for patients in a serious condition of acidosis, emaciation, and weakness. It is not a new feature, but rather is a relic of the former treatment. Whisky is no essential part of the treatment, and there is no positive proof that it does good even in the minority of cases where it is used. It may be that alcohol is valuable to tide such patients over the fast which they undergo and to eke out their diet somewhat for a short time afterward. In average cases we do not use it at all in treatment, and in all cases we try to stop it as soon as possible. Our treatment represents abandonment rather than advocacy of the use of whisky, since you will find that alcohol was used very freely in the treatment of severe diabetes heretofore. Our aim is to bring our patients back to healthful diet and hygiene as rapidly as possible, and we therefore avoid forming habits of alcohol, opium, and the like. Alcohol is not entirely forbidden to the more elderly patients who are thoroughly accustomed to its use, but we avoid imposing the habit upon others. In any event, a malt whisky, such as Duffy's would be unsuitable because of the carbohydrate content.

Very truly yours,

FREDERICK M. ALLEN.

The article in the *Journal of the American Medical Association* referred to by Dr.

* * *

A Summons to Public Health Officials

IT IS my conviction that it is the duty of health departments to inaugurate and carry on by all available means persistent campaigns of education (against alcohol) to the end that the community which they are called upon to protect may be in a position to judge for themselves as organized social groups and as independent members, whether they are willing to ignore their own interest, their safety, and their health by permitting the continued unlimited manufacture and sale of alcohol.

I venture to predict that no advance in the control of preventable disease of bacterial or infectious origin in the future could accomplish such reduction of the morbidity and mortality of the community as would undoubtedly follow the elimination of alcohol as a beverage.—Haven Emerson, M. D., Health Commissioner, New York City.

* * *

WHAT example has produced can in turn be done away with by example. But this example must come from above. . . . For the student world which now forms one of the chief strongholds of our drinking customs and which is credited with greatest knowledge and experience in these matters, there grows out of this fact a peculiarly pressing duty. . . . To us all, and especially to us university teachers, belongs the imperative duty of entering personally into this question of the national health. . . . We must forge and wield the weapons to banish alcohol from our national life, even if for no other reason than that, if not by our will and efforts, then against our will it will come to pass.—Prof. Emil Kraepelin.

* * *

Emancipation from this fearful evil will form an epoch in the life of humanity, and that epoch is, I believe, dawning.—Tolstoi.

Allen shows plainly that the whisky when used at all was employed only in certain special advanced cases for a limited time under most careful medical supervision. There is no hint of these limitations in the Duffy advertisement.

Experiments at the Carnegie Nutrition Laboratory reported (1916) since this article was written in 1914 indicate that probably alcohol does not accomplish certain ends for which it was given in the treatment outlined by Dr. Allen. Dr. Allen himself in his present letter says that "whisky is no essential part of the treatment and there is no proof that it does good even in the minority of cases where it is used."

Finally, Duffy's Malt Whisky is ruled out of consideration for diabetes "in any event," "because of its carbohydrate content."

In other words, the advertisement of this whisky is not only advising alcohol for treatment of diabetes, which is a declining method used only under special conditions, but it also recommends the use of a liquor containing the very thing diabetic patients have to avoid as much as possible—carbohydrates.

Current Comment

IGNORANCE is what keeps the little white hearse working overtime.—*Juvenile Court Record*.

*

WET brain when it occurs is usually an end stage of delirium tremens. The mortality is nearly 75 per cent.—C. E. Sceleth, M. D., A. F. Beifeld, M. D.

*

THE present condition of the temperance movement in America is phenomenal, owing in large degree to scientific instruction.—Henry O. Marcy, M. D., LL. D.

*

PUT man first and tonnage second and many accidents will be prevented. We have kept the wheels of industry running and also the hearse. We have made records and so has the recording angel.—Peter Roberts, Ph.D.

*

It seems absurd to spend millions to equip the best youth of the nation for war and sit calmly by and allow hundreds of thousands of babies, the soldiers of the future, to die of neglect.—Frances M. Hollingshead, M. D.—*Juvenile Court Record*, 326 Madison avenue, Chicago, Ill.

*

THE general trend of mortality is the same in all companies and shows that "Old Mortality" and "John Barleycorn" are exceedingly good cronies and wherever you find alcohol you find the following formula at work: More alcohol—higher death-rate.—Eugene Lyman Fisk, M. D.

*

THE better day will not dawn for humanity if we leave the millions of South-eastern Europe to themselves, or, worse still, to the demoralizing forces of the saloon, the gambler, and the sinister politician. The very progress of civilization demands that we give this man the best that is in us, that we may preserve the best that was bequeathed to us.—Peter Roberts, Ph.D.

*

THE unwritten record of the injury which alcoholic drinks played in our Civil War is beyond estimate. From the private in the field to the officer in command,

all soldiers had been taught to feel the value of so-called alcoholic stimulants. Many a battlefield was lost owing to the influence of this pernicious drug. We can now understand why in the armies and navies of all the nations of the world, alcoholic drinks are either limited or used in very limited quantities.

It is a singular paradox that this most devastating European War, unparalleled in history, is being fought by millions of soldiers, all marching under the banners of temperance.—Henry O. Marcy, M. D.

*

WAR is destroying intemperance, when it has always been the very mother of drunkenness and the wet nurse of all the vices of dissipation.—Woods Hutchinson, M. D.

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THAT Shakespeare was thoroughly familiar with the effects of intoxicants through personal experience as well as through observation, nobody can doubt. who knows his Falstaff, his Sir Toby Welch and his Caliban. On February 10, 1616, his daughter, Judith, married Thomas Quincy, a gentleman, by the way, engaged in the manufacture of alcoholic intoxicants. To celebrate the event Shakespeare entertained his two old cronies, Michael Drayton, the poet, and Ben Johnson, the dramatist, at New Place, and, according to the statement of John Ward, the vicar, "Itt seems drank too hard, for Shakespeare died of a feavour there contracted."—Arthur C. Jacobson, M. D.

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THERE has been a greater falling off in the habit of drinking in the last twenty-five years than in all the preceding 2,000 years of modern history, because we had discovered that alcohol in any form or amount took the keenness off our fighting edge, gummed up the cards in the game of life and handicapped our chances of victory and success in any and every line of endeavor.

Even in the strictest moderation alcohol was found to cloud our judgment, to dull the keenness of our wit, to make our grasp fumbling, our muscles sluggish and our touch uncertain.—Woods Hutchinson, M. D.

What Is In the Magazines

LIQUOR BUSINESS DANGEROUS TO HEALTH

BY EUGENE LYMAN FISK, M. D.

NOT the least important feature of the investigation conducted by the forty-three American life insurance companies was the mortality figures in occupations where alcohol figured as a hazard.

These were as follows:

Hotels	Death-rate above the normal. Per cent.
Proprietors, superintendents, and managers not tending bar.....	35
Proprietors, superintendents, and managers tending bar.....	78
Saloons and Billiard Rooms, Pool Rooms and Bowling Alleys With Bar	
Proprietors and managers not tending bar	82
Proprietors and managers tending bar	73
Breweries	
Proprietors, managers and superintendents	35
Clerks	30
Foremen, maltsters, beer-pump repairmen and journeymen	52
Distilleries	
Proprietors, managers and superintendents (15 per cent below normal.)	
Traveling salesmen and collectors for distilleries, breweries and wholesale liquor houses (excluding lifelong total abstainers)	28
Wholesale Liquor Houses	
Proprietors and managers	22
Clerks	12
Restaurants With Bar	
Proprietors, superintendents, and managers not tending bar.....	52
Waiters in hotels, restaurants and clubs where liquor is served.....	77

These figures indicate that saloonkeepers have a death-rate higher than that of underground mine foremen; that brewery foremen, maltsters and the like have a death-rate higher than electric linemen,

glass-workers, city firemen (laddermen, pipemen, hosemen), metal grinders or hot-iron workers, although there is nothing in the brewery or saloon business *per se* that is at all hazardous or unhealthful, aside from the possible temptation to drink and its collateral hazards. Proprietors of distilleries are obviously not so directly exposed to temptation or to other adverse influences that obtain in the retail liquor trade; this accounts for the favorable mortality.

Among hotel-keepers tending bar the death-rate from cirrhosis of the liver was six times the normal; from diabetes, three times the normal; from cerebral hemorrhage or apoplexy, nearly twice the normal; from organic diseases of the heart, nearly twice the normal; from Bright's disease, nearly three times the normal; from pneumonia, nearly twice the normal.

For brewery officials insuring under 45, the death-rate from cancer and other malignant tumors, cerebral hemorrhage and apoplexy, organic diseases of the heart, pneumonia and Bright's disease, among the proprietors, managers and superintendents is about twice the normal, and from cirrhosis of the liver three times the normal. The death-rate from suicide is nearly twice the normal. — *Atlantic Monthly*, November, 1916.

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AGAIN THE FROG'S LEG

ABOUT fourteen years ago an experiment upon the weight-lifting power of the muscles of a frog's leg was reported from an American scientific laboratory as showing that when a 10 per cent solution of alcohol was supplied to the muscle it did more work than in its normal condition. The authors reporting the experiment thought the alcohol acted as a food for the muscle.

Four years afterward, the experiment was repeated in another laboratory, where it was found that an injection of Ringer's fluid—a salt solution—had a better effect than the alcohol solution and that it was not the alcohol that helped the muscle work better but the fluid carrying it. The explanation was that the winter frogs

which were used for the experiment had less water in their systems while in the hibernating state, and that the muscles were made more active by the addition of the water in the solutions used.

Six years passed, and one of the original experimenters reported again new experiments showing greater working power than normal when a muscle had received alcohol. There appeared to be no doubt in his mind about the addition to working ability which the alcohol had supplied.

Again the experiment has been repeated in other hands in the physiological laboratory of the University of Mississippi and a discrepancy discovered. The method of experimentation consisted in tying one of the frog's legs, testing the muscle of the other leg, then administering alcohol and testing again after a wait of about half an hour. The experimenters were careful, however, to make a corresponding test half an hour after trying the muscle of the other leg, when no alcohol had been given and in this case they found a greater increase in working ability than in the corresponding test after alcohol or Ringer's fluid. The tying of the one leg increased the working power of the other and the increase was greater when no alcohol or Ringer's fluid was given than when they were given.

Another puncture of the theory that alcohol acts as a food in supplying working power.

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THE EUGENIC ASPECT OF MOTHERS' PENSIONS FOR DRUNKARDS' WIVES

BY withholding help from poor mothers when they need it, society is directly aiding in the production of defective children. When a father becomes a drinker, the mother is forced to live with him and produce some more children as the price of gaining some support for the children she already has. She thus unwittingly raises defective children. If she separated from her drinking husband she would have virtually no means of supporting her young children and the law would part her from them. In the drunkard lies her only hope of keeping her children. By forcing the mother to breed defective children we are filling our asylums with insane and epi-

leptic persons. Ten times the cost of the mothers' pension would be saved by decreases of outlay on insane asylums. Under the mothers' pension law we give a woman the privilege of throwing her drunken husband out and keeping her children with her. Integrity of national character is thus affected vitally by forcing unfortunate women to live for the pittance that keeps her children with her with drunken or degenerate men. Mothers know instinctively that they should not breed more sub-normal children. Within them struggle on the sacred emotions of normal motherhood desirous of keeping the race clean and wholesome. Shall society build more insane asylums and retreats for idiots and morons, or stop breeding lunatics and idiots?—William Murphy in *Juvenile Court Record*, October, 1916.

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THE VALUE OF TRAINING THE CHILD TO SELF-CONTROL

NOT all inebriates become so because of craving or because psychasthenic. Many do so because of an easily influenced character. This may be due either to mere thoughtlessness or to weakness of the will, that is an inability to resist suggestions of others. This character is of the type which tends towards medical hysteria, that is to say, subject to the disorders induced by suggestion. Like psychasthenic manifestations, those of hysteria usually have their foundation in tendencies which originated in childhood. These may be purely due to a lack of training in inhibition. In many families, communities, or social strata, this is lacking. Indifference to the up-bringing of the child is sure to produce this tendency unless it is corrected by the collisions which experience brings. In some instances, it is possible that impulsiveness with failure of inhibition is temperamental and inborn; but even in these cases it is held in abeyance by an environment where inhibition is the fashion. This is well illustrated by the habits of the people of Scotland and those of New England in former days.—Tom A. Williams, M. D., in *Interstate Medical Journal*, June, 1916.

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HE that does a base thing in zeal for his friend burns the golden thread that binds them together.—Jeremy Taylor.

THE RELIABILITY OF LIFE INSURANCE STATISTICS ON ABSTAINERS' MORTALITY

Efforts have been made by some apparently to discredit life insurance statistics on the comparative mortality of abstainers and non-abstainers. Dr. Fisk, who has personal experience and acquaintance with the methods of life insurance companies thus answers this criticism in the November Atlantic Monthly.

WHATEVER may have been the earlier ideas regarding total abstinence, it is well known that non-abstaining policyholders in the British company whose experiences have been quoted were very carefully selected; indeed, the greater confidence in the longevity of abstainers manifested by the establishment of special departments for them no doubt influences the management of such companies to accept slightly impaired abstainers with greater confidence than slightly impaired users; hence there is no reason to believe that the general physical or social type of the abstainers was superior to that of the general class.

In the American companies especially, the custom has been to rule strongly against the alcohol. One large company with which I was connected for many years had an almost inflexible rule that intoxication within one year of the date of application disqualified a candidate; free drinking, exciting some doubt as to the future, disqualified for a period of at least three years after reform, if not permanently, depending upon the extent of the habit called for rejection. It will be noted that this was wise practice, according to the mortality figures just produced.

It is extremely important to bear this in mind, for the reason that these standards of selection show that the mortality figures as to drinkers are derived from supposedly favorable types, and that many individuals in the general population admitting the same degree of indulgence would show a higher mortality. That is, a policyholder admitting an indulgence of three glasses of beer daily would show a lighter mortality than the average man in the population indulging to the same degree. The application of a person suspected of being seriously tainted with liquor is never knowingly accepted on standard forms of insurance by any company. The same principle

holds good for persons engaged in those special occupations in which liquor is a hazard. The habits of all such candidates are closely scrutinized, and the benefit of any reasonable doubt is given to the company rather than to the applicant.

It is commonly stated that, inasmuch as these classifications as to the degree of drinking were based on the applicant's own statements, they cannot be accepted as accurate, and that the excess mortality among the alleged moderate users of alcohol was due to the admission of cases of marked intemperance or to the subsequent development of intemperance among members of that class. Some allowance must, of course, be made for such a factor, but the broad assumption that the life insurance companies accepted without question the testimony of applicants as to their habits is without warrant.

Even in the British companies, some evidence as to the character other than the applicant's own statement is required; and the medical examiner is also required to pass upon the apparent truthfulness of the statements regarding the use of liquor, past and present.

In American companies, there is a very careful investigation made of the habits of life of all applicants. The "moral hazard" is considered quite as carefully as the physical hazard, and a life that is morally impaired or seriously threatened with moral impairment is rejected. In other words, a man who is in danger of life-failure is not considered a good "risk." Liquor is one of the main factors in impairing the moral hazard. A life insurance company looks on this matter from a cold-blooded business standpoint, entirely apart from any standards of social morality. Men are often rejected because of drink who are still socially respected; and men are accepted for life insurance who are not socially respected, provided their habits are not injurious to health and their future seems reasonably secure. There has for years prevailed among life insurance offices a distrust for the man who drinks every day, even in so-called moderation; and the applications of such persons are always scrutinized very carefully before acceptance. In the main, therefore, the classification of these persons with respect to their consumption of alcohol may be regarded

as sufficiently accurate for the purpose of the inquiry. . . .

It has often been claimed that abstainers are a mean lot, often too stingy to die or indulge in anything except long life, and that they are drawn largely from occupations characterized by conservative living, such as that of clergyman, school teacher, college professor, and the like. In this connection, a summary of the statements of Mr. Roderick McKenzie Moore, actuary of the United Kingdom Temperance and General Provident Institution, is entitled to a large measure of confidence. I have the best means of knowing that he is a man governed by scientific caution and veracity, desirous of presenting the facts free from bias, purely as a contribution to science.

He has stated that "the total abstainers' class" was not nursed or favored to produce a low mortality. So far as could be determined (and many of the risks came in personal contact with the officers) they were of the same general class as the non-abstainers. They were written by the same group of agents, for the same kind of policies, for the same average amounts, **and were in the same general walks of life**, and of the same general financial condition. They were almost equal in numbers to the general class and did not form a small high-grade section of the policy-holding body. On the contrary, greater care was exercised in the selection of the users of alcohol because of the less favorable experience anticipated with them, and many borderline "risks" were accepted in the abstaining class because of a feeling that their abstinence would neutralize some unfavorable factor.

The statements of the expert, who has personal contact with many of the cases in question, are of greater value than the off-hand criticism of those who have no first-hand knowledge of the group and who have never taken the trouble carefully to read and digest the evidence.

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THE DRINKING HABITS OF IMMIGRANTS

IN a discussion of the relation of extreme temperatures to the efficiency of workmen at the conference of Industrial Physicians in Harrisburg, Pa. (May, 1916), Dr. A. W. Colcord of Clairton said that the men in the mills where he prac-

tices are exposed at short periods to a temperature of 250 degrees F., but the men who suffer come almost entirely from foreigners. "They are new men not yet acclimated; all are alcoholic, mainly heavy drinkers. They eat food that is poor in quality and poorly cooked. It is eaten at irregular intervals and many of them over-eat. They live in crowded quarters with dirty surroundings, rarely take a bath, sleep with their windows down tight, sometimes as many as ten sleeping in one small room.

"I had at one time nine stretchers of heat cases, and every one was a man of this class."—*Penn. Medical Journal*, October, 1916.

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ALCOHOL AND NATIONAL FUTURE

BY G. T. W. PATRICK

THE relentless figures of the psychological laboratory have shown that efficiency of every kind, physical and mental, is decreased even by small doses of alcohol, while the same is loudly preached and far more effectively by the placards now posted about the buildings of great industrial works.

Drinkers will smile at the reports of psychological laboratories on the damaging effects of alcohol, but the smiling ceases suddenly when the workers in a great steel plant see the following signs posted:

"In making promotions in all departments of the plant, superintendents of departments and foremen will select for promotion only those who do not use intoxicating liquors."

Once let a fixed association be formed in the public mind between alcohol and inefficiency and the battle has been nearly won. Perhaps nothing better has happened to the cause of temperance than the coining of the word "booze." The poetical associations called up by the goddess of wine vanish and instead come pictures of inefficiency and imbecility and alcohol is damned. No one cares to drink "booze."

A long list of experiments in physiological and psychological laboratories has shown that alcohol in both large and small doses decreases with fateful regularity all kinds of efficiency, both mental and physical. Whether in typewriting or typesetting or in mountain climbing or

in pistol practice or in arithmetical computations, alcohol has been shown to exert a damaging effect, to diminish accuracy and decrease speed, and to lessen the amount of work accomplished.

Life insurance companies welcome the abstainer, not from sentiment or tradition but as a result of statistical researches. Arctic and tropical explorers, engineering parties, foremen and employers of labor, training-coaches of athletic teams, all discourage or prohibit the use of alcohol so long as there is work to be done or games to be won. Social workers look with dread upon the havoc done by alcohol in contributing to intensify the problem of crime, pauperism and feeble-mindedness. Physicians find it of less and less value as a therapeutic agent and more and more a cause of lessened resistance to disease.

The final conclusiveness of these researches has been questioned and it is true that there are many possible sources of error in the laboratory tests. Much interest has therefore been aroused by the series of rigid experiments now being carried out by the Nutrition Laboratory of the Carnegie Institute. The first results of these researches have now been published and they have confirmed thus far the previous studies. The depressant action of alcohol has been verified, and a "clear indication of decreased organic efficiency as a result of moderate doses of alcohol" has been shown. . . .

The future is very dubious for any race of people which has to depend upon drugs to establish a proper psycho-physical equilibrium. Tobacco, alcohol, tea and coffee have a momentary harmonizing effect, but what will be the result in the long run of this perpetual doping of the higher brain, not to speak here at all of toxic effects or of the social results of excessive use?

The problem, therefore, as we see, goes deeper than considerations of individual health or even of the present social welfare. It is a question of the welfare and the progress of the race. It is said that Gladstone was accustomed to bemoan the lack of intellectual progress of mankind in the last two or three centuries. Others believe that there are many signs of physical decadence. Are we definitely in position to say that racial development has not been retarded by the accumula-

tive effects of tobacco and alcohol? As long as one sex only uses these drugs, the damage is greater to the individual than to the race. When both sexes and all the people use tobacco, as among the Turks, the racial damage may be enormously increased.

At the present writing, it is highly probable that such a general use of both sexes and all the people of moderate doses of alcohol would result in racial damage that would be catastrophic. And we shall derive small comfort from the theory of the non-heritable character of acquired traits, for these toxic drugs may have directly or indirectly a damaging effect upon the germ cells.—*Interstate Medical Journal*, June, 1916.

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ALCOHOL'S RESPONSIBILITY FOR TUBERCULOSIS IN CINCINNATI

IN an exhaustive survey by Robinson and Wilson [Public Health Bulletin No. 73] of conditions probably concerned in causing the usually high incidence of tuberculosis in the city of Cincinnati, it was found in respect to many industries in the city there were no causes inherent in the occupations which helped on this increase, but that there were a great many factory influences, in about 19 per cent of the cases, all remediable, to which this influence could be in part traced.

In 62 per cent of the cases there was a distinct hereditary factor and about 19 per cent were traceable to poor housing conditions—the two not distinctly separable but overlapping.

"It is a significant fact that as much as 13 per cent of the cases can be directly attributed to alcoholic excess, in spite of the still very popular belief that alcohol is curative and not productive of tuberculosis.—*Boston Medical and Surgical Journal*, Aug. 3, 1916.

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DRINK AND INSANITY

By JOSEPH McIVOR, M. D.

DURING the year 1906 there were 12,141 admissions to the Philadelphia General Hospital, of which 1,061 were male alcoholics and 161 female alcoholics. There was a gradual increase in the total number admitted to the hospital with a corresponding increase in alcoholics until 1915 there were 19,627 admitted, of which 2,279 were male alcoholics, and 403 were female. Of course, these figures do

not represent so many people as many of them were admitted a number of times during the year.

The class of patients admitted to the alcoholic wards is variable, ranging from the lowest type of mentality on through the middle class up to some who were once very bright men and women. Practically all vocations of life are represented, including clergymen, business men, bankers, brokers, druggists, lawyers and physicians. The lower classes, however, make up the big proportion of the alcoholics.

The treatment recommended is confinement in an institution not less than three months for mild cases, until they are judged safe, if ever, to go out—preferably into the country. When they go out, they should seek new associations and new surroundings, a new start, in active work fitted to their abilities. . .

The alcoholic question will never be solved on a moral basis, but the time is coming when it will be solved and economy is going to be the main factor. The time will soon be at hand when industrial concerns will no longer employ alcoholics on account of the increased risk, and the whole thing will simply be a survival of the fittest.—*New York Medical Journal*, Sept. 30, 1916.

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A CULTIVATED HABIT

THE Social Service Bureau of Bellevue Hospital made a field study of drug users committed to Bellevue between August 1, 1915, and January 1, 1916. In all, 202 cases were investigated. Their report, according to Burdette G. Lewis, Commissioner of Correction of the city of New York in the *Interstate Medical Journal* (June, 1916), shows that some of these addicts acquired the habit through illness. They say: "The larger proportion, however, acquired the habit through distributors on the street, both men and women, who made a regular business of offering the drug free at first in order to add to their clientele. They keep informed of the whereabouts of their customers; they even keep track of the probable time a new supply will be needed and pursue the users to their homes. Some make the rounds of the homes at regular intervals to give the drug hypodermically. Some of our patients have

been tempted even on the way from the hospital to their homes.

"It is a mistake to assume that all drug users are sure to become degenerate and immoral in every respect. Many of them are the finest people we have, and while they become sick because they are really afflicted with the drug addiction disease, they do not become degenerate and dissolute persons because of their use of the drugs."

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A COSTLY HEALTH QUESTION

MUNICIPAL, state and national health boards, a united profession, and individual physicians are doing a great deal in the way of improving sanitary conditions, on lessening the spread and stamping out the many kinds of infection and contagion, and thus improving the public health.

But in this battle for health and efficiency there is one thing, as it seems to me, that is largely overlooked, shunned or in some way neglected by the profession, and consequently a great breach is seen and felt in the results. It is one of the most vitally important unsolved problems in the world today; it costs the nation more misery and more lives than tuberculosis.

While with some it may be unpopular, it is such a menace to the public health, and to me so glaring, that I have no apologies to make for taking as a subject, **Alcohol and the Public Health.**—G. F. Jones, M. D., in President's address, Delaware Medical Society.

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THREE FAMILY HISTORIES

(CONCLUDED FROM PAGE 63)

shiftless; 39 below average intelligence; 34 ugly and quarrelsome; 30 alcoholic; 27 notoriously irregular sexually; 18 had a habit of leaving husband or wife.

The descendants of William and Mary Dack have cost the state \$28,354. The actual cost to society has been much greater.

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OUT of 754 families in Rochester, N. Y., 147 presented intemperance as a serious problem, and in two-thirds of the families combined with intemperance, was the problem of unemployment; while tuberculosis, desertion, epilepsy and feeble-mindedness each appeared in about 15 per cent of all the families.—William Kirk, Gen. Sec'y. United Charities.

A Call to the College Man

A SUMMONS to the college professor and college man to assume virile and consequential leadership in the alcohol question is issued by Prof. Rockwell D. Hunt of the University of Southern California in *The Survey* (Nov. 18). Among the letters on the subject quoted by Professor Hunt is the following which he calls a "virile, forward-looking letter," from Prof. George E. Howard of Nebraska, which "deserves to be recognized as a classic in the literature of prohibition." It was dated April 14, 1914.

"The belief is pervasive in our country that public opinion is now ready to sustain the decisive forward step in the movement against the liquor interest, and especially against the 'organized American saloon.' Already the movement has become national. Thus far the public school, the college and the university have signally failed to take their rightful place in the movement. Individually many courageous teachers have done their duty; but there has not yet been an earnest, thought-out, organized effort of all the educational forces as such. In the place of boldness, there has been timidity. Indeed the example set by professors and other leaders in college life has often been harmful. There exists an academic cynicism on the drink habit, as on some other great moral issues, that is very menacing and disheartening. College men are largely responsible for the excessive drinking and smoking habits of students. It is high time, as you suggest, for the economists and the sociologists to take the lead in an organized campaign against the alcohol traffic in all its many sinister aspects. Science has spoken. No safe refuge is left for the liquor interest. Nothing short of nation-wide prohibition of the manufacture and sale of alcoholic drinks is adequate. College and univer-

sity men and women should come forward, at whatever risk or sacrifice, to claim the leadership in this great battle for social righteousness."

"Dr. Howard's letter," says Professor Hunt, "renders special pleading unnecessary. Since it was written immense strides have been taken. Fisher has come clear over to Howard's position, as an extract from his letter of February 24, 1916, to one invited to become a member of the Committee of Sixty on National Prohibition will indicate:

"'Personally, I have only recently and almost reluctantly come to the conclusion that national prohibition is the proper method of solving this great problem. I still believe that the general education of the public is of the utmost importance. But the two go hand in hand.'

"The Yale professor is not alone in his new stand. Professors Loeb, Stockard, Jordan, O'Shea, Ross and W. S. Hall are among those enrolled on the Committee of Sixty. This committee is but one of a number of forces which seem really to have entered upon a 'serious campaign of education looking toward the total elimination of the drink traffic by 1920.'

"As a young professor of political science, Woodrow Wilson, once said. 'It has never been natural, it has seldom been possible in this country, for learning to seek a place apart and hold aloof from affairs.' We are coming more clearly to perceive that the 'academic attitude' not only weighs and balances with scientific impartiality, but accepts conclusions that have been definitely reached and prompts to virile action. All science is for the benefit of the race; pre-eminent college men—economists, sociologists, and all the rest—are beginning to apprehend the bigness of their opportunity to advance human welfare by heeding the social demand for the elimination of alcoholism."

Social custom and national habit have so sanctioned the use of this particularly anti-social drug that study, judgment and education have to win their case against a vast inertia.

Is the task harder than teaching the world that it may conquer tuberculosis or the nations that they cannot live if they waste their baby life?

Is not the goal as splendid, and shall our hopes be less than those of the crusaders against tuberculosis and the waste of child life, who have saved more lives annually than the armies are costing every year in Europe?—Dr. Haven Emerson.

From the New Books

THE DOUBLE RISKS OF CHILDREN OF DRUNKARDS

BY MICHAEL F. GUYER, M. D.

WHILE it is true that many drunkards would not develop without free access to alcohol, on the other hand many would never develop without a bad heredity back of them, which gives them a peculiar nervous constitution that renders alcohol an undue stimulus. In the presence of alcohol most of these unfortunates are helpless pawns of a hereditary weakness.

So when the question of alcoholism is viewed from all angles, the children of the human drunkard would seem to run a double menace of misfortune, since they may be subject both to the direct poisoning effects of alcohol and the results of an inheritable degeneracy.

In any thoroughgoing study of alcoholism in man many factors will have to be reckoned with. First of all, there is the question of inherent lack of control. This is probably the principal thing inherited where heredity truly enters as a factor. That example and social environment are important factors in addition to or in place of heredity is clear, too, when we observe that often it is the boys only who take after a drunken father, for there is no evidence that the inherited tendency when it really exists is at all sex-linked. Again, in certain occupations carried on under unwholesome influences relief is frequently sought in alcoholic stimulants, and such custom may easily crystallize into habit. Furthermore, the accustoming young children to doses of alcohol, or the unborn young to alcohol through the body of a drunken mother, may be strongly contributory toward establishing inebriety in certain cases. As we have seen from an abundance of experimental data on animals, moreover, the nurture effects on germ-cells may result in the production of weakened offspring. Such offspring in the case of man are probably less able to withstand temptations of all kinds and hence readily succumb to the habit-forming effects of alcohol if once its use is begun. Lastly, it must not be forgotten that alcoholism

in the father usually means poverty and the subsequent accompaniment of malnutrition and neglect of the children, and this in itself may not only account for poor development of the latter, but may also be strongly contributory toward establishing the habit of alcoholism in them.

An inherent bias plus most of the other conditions just enumerated is the not unusual lot of the offspring of drunkards. —From *Being Well Born*.

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ALCOHOL'S RELATION TO IMMORALITY

BY WILLIAM BURGESS

THE relative degree of the many causes which lead to prostitution cannot easily be determined. Drink, low wages, dance halls and other pleasure resorts, poverty and seductions, lack of home training, ignorance, bad books, love of finery; all these are among the common causes—and chief among them is alcohol.

Dr. Prince A. Morrow says: "A large proportion of men and a still larger proportion of women owe their initial debauch to the influence of alcohol."

"Langstein's statistics of 169 cases of venereal infection, comprising for the main part statistics of military men of different grades are, as follows: 18 were drunk at the time; 55 were intoxicated; 85 had drunk but moderately; one was a chronic alcoholic; 48.3 per cent were under the influence of alcohol. M. Forrel's investigations show that 76.4 per cent of venereal contaminations were effected under the influence of alcohol, and the greatest number of contaminations occurred in persons below 25 years of age."

All authorities agree that alcoholism is an enormous factor in the social evil problem.

Every vice commission of recent times and every authority who speaks on the subject points to the intimate relation between the saloon and the brothel, and between liquor and lust, not only in their close relation as cause and effect, but also to the fact that the worst forms of the

social evil could not exist were it not for liquor and the saloon.

More than 10 per cent of 226 girls reported by the Kansas City inquiry on vice conditions of that city declared their ruin as wholly due to drink, and if one reflects upon the other eight "causes" there will be little doubt but that liquor was a chief contributory agent in them. Drinking and dancing, for example, as causes of prostitution are usually related.

Some of the contributory causes are strikingly named in the following paragraph from the Chicago report, pages 175, 176:

"From the records of 156 girls committed to legal custody from other portions of the state than Chicago, 86 were the children of intemperate fathers and 13 of intemperate mothers."

Many saloons are in direct partnership with the evil and such can only be dealt

with by the nemesis of law as houses of ill-fame.

The Philadelphia Commission has found in its investigation that the most dangerous immoral influence, and the most important financial interest, outside of the business of prostitution as carried on in houses, is the disorderly saloons. The proprietors of these places are using prostitutes as an adjunct to the sale of beer and liquor, and are allowing them to openly solicit for immoral purposes in their rear rooms. This is done in spite of the constant statements of the brewers and wholesale liquor dealers that they are against the use of prostitutes in saloons which they supply.

The Massachusetts Commission had the addresses of 110 different cafés and saloons in the state habitually frequented by prostitutes for the purpose of securing customers.—From *The World's Social Evil*.

The Library Table

BEING WELL-BORN. By Michael F. Guyer, Ph.D. Indianapolis: Bobbs-Merrill Company. \$1.00 net.

This volume from the Childhood and Youth series, edited by Prof. M. V. O'Shea of the University of Wisconsin, is invaluable for the student who wishes to know the details of modern knowledge and theories of the processes of heredity. The author does not stop with the biological facts but carries them on to the discussion of the practical questions of mental and nervous defects, crime, and delinquency, constructive measures for race betterment through heredity.

The question of the relation of alcohol to heredity is thoroughly discussed with the conclusion that "little doubt remains that excessive alcoholism might result in the production of defective offspring."

THE IMMIGRATION PROBLEM. By Jeremiah W. Jenks and W. Jett Lauck. New York: Funk & Wagnalls Company, Third Edition, Revised and Enlarged. \$1.75 net.

The data on the immigration problem collected by the United States Immigration Commission in 42 volumes is here condensed and brought up to date (1913) with admirable clarity in outlining the extent of the problem of the causes of immigration to the United States, immigrant characteristics likely to affect American institutions, the industrial, economic and social problems involved. The Commission concluded that American life as regards health and crime is less menaced than

sometimes thought, that industrial prosperity is threatened owing to the fact that the new immigration has come in enormous numbers, is largely unskilled, gravitates towards cities and is content with a lower scale of living.

The literacy test which has now been vetoed by three presidents, was recommended by the Commission as offering the best test for reducing immigration because of the handicap imposed by illiteracy in understanding and adoption of American institutions and principles. The situation in Europe caused by the war will perhaps help solve this problem for us.

In the matter of alcoholism the Commission reported that statistics kept by the Bellevue and Allied Hospitals in New York for seven months, August 1, 1908, to February 1, 1909, showed that of the Irish treated 35.9 per cent were for alcoholism; of the English 27.5 per cent, German 12.8 per cent, Italians 1.6 per cent, Hebrews .9 of 1 per cent.

IMMIGRANT RACES IN NORTH AMERICA. By Peter Roberts, Ph.D. New York: Association Press. 50 cents net.

The reader is reminded of the Tower of Babel and the confusion of tongues heard on the day of Pentecost in reading this convenient little book of information about our "immigrant nation." The classified government list includes 37 different peoples; Dr. Roberts' includes 41, covering the 30,000,000 people who entered America's gates in 90 years.

The book gives the background for each of these people—their geographical origin, lan-

guage, government and religion, as well as their prevalence in the population of the United States. References enable the reader to carry further the study of each group. The book makes an admirable preface for Dr. Roberts' later work—**The New Immigration**.

THE NEW IMMIGRATION. By Peter Roberts, Ph. D. New York: The MacMillan Co. \$1.60.

Without being unduly technical, Dr. Roberts has given American citizens a view of immigrant life, forces and needs in America which is both sympathetic and stimulating. The average native-born American calmly ignores any responsibility for these new citizens who dig his coal, build his roads, make his clothes and shine his shoes. The results cited by Dr. Roberts of just common neighborliness and helpfulness in understanding the new American and in assisting him to an understanding of his adopted or even temporary home, suggest not only a duty but a privilege for constructive patriotism. There is much in the record to make the native American blush with shame. There is much to make him glad and proud. The average reader will not be proud of the story of the saloon and the immigrant. While it is true that the foreign-born of the new immigration brought the custom of the free use of alcohol with them and by so much have increased the demand for drink and encouragement of the traffic, it appears on the other hand that too often he has been left to find in the saloon the labor bureau, the bank, the social centre that a more far-seeing patriotism would have provided for him in other ways without subjecting him to saloon exploitation. This in many cases has been shameless in the number of establishments crowded upon him while the native-born sections are kept free from its immediate influence. Extracts from Dr. Roberts' book will be found elsewhere in these columns.

THE TIDE OF IMMIGRATION. By Frank Julian Warne. New York: D. Appleton & Company. \$2.50 net.

Still another author points out with careful detail the difference between the old and the new immigration and the special problems which this change presents to the American nation. He finds the predominant cause of the immense volume of immigration to be economic. The incoming tide increases when business conditions are good in the United States and falls when prosperity declines. The same conditions determine in a measure the extent to which aliens return to their native lands. Here the author finds an answer to the question, What of Immigration after the War? With higher wages paid here than in Europe he concludes that the United States will offer a better chance to the common man for starting life over again than Europe, with its inevitable heavy financial "burden of replacement and reconstruction;" that, great as have been the human losses in the war, they constitute so small a part of the crowded populations of Europe that they will not operate as deterrents to emigration to America. The importance that wise action for the regulation of immigration into the United States be taken in the "breathing-spell" that the war

affords is graphically presented, as well as the history of the mostly fruitless efforts of recent years to secure restrictive legislation.

THE WORLD'S SOCIAL EVIL. By William Burgess. Desplaines, Ill. The Book Bureau. \$1.50.

Probably there is no evil affecting society concerning which there was such long silence or which has been more rapidly dragged out in all its hideousness into the light of public consciousness in the past decade than what is known as the social evil. This author has done the work of combating it a genuine service by his review of the history and literature of the subject, especially that of recent years, showing its enormous social importance, what has been done to combat it, measures that are proving successful, and the necessity of widespread preventive educational and other efforts. An appendix by Chief Justice Harry Olsen of the Chicago Municipal Court urges the importance of early detection and segregation of the feeble-minded since so large a proportion of the victims of social vice show this defect. Texts of valuable laws are included as is a chart of the laws enacted by the federal and state governments for the suppression of prostitution. Like all other writers on the question, the author emphasizes the casual relation of alcohol to its twin evil.

*

"Some of the grandest discoveries of the ages," said the great scientist sonorously, "have been the result of accidents."

"I can readily believe that," said the fair lady. "I once made one that way myself."

The great man blinked his amazement. "May I ask what it was?"

"Certainly," replied the fair one. "I found that by keeping a bottle of ink handy you can use a fountain pen just like any other pen—without all the bother of filling it."

*

Historical controversies are creeping into the schools. In a New York public institution attended by many races, during an examination in history the teacher asked a little chap, "Who discovered America?"

He was evidently thrown into a panic and hesitated, much to the teacher's surprise.

"O, please, ma'am," he finally stammered, "ask me somethin' else."

"Something else, Jimmy? Why should I do that?"

"The fellers was talkin' 'bout it yesterday," replied Jimmy. "Pat McGee said it was discovered by an Irish saint. Olaf he said it was a sailor from Norway, and Giovanni said it was Columbus, an' if you'd 'a' seen what happened you wouldn't ask a little feller like me." —Kansas City Star.

*

A soldier whose head and face were heavily swathed in bandages, and who obviously had had a bad time, was being feelingly sympathized with by the solicitous lady. "And were you wounded in the head, my good fellow?"

"No, ma'am," Tommy replied. "I was wounded in the ankle, but the bandages slipped." —Tit-Bits.

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"The Liquor Problem in Russia"

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"Of late a great deal is written in America about Russia. The bloody war in which Russia is taking such a prominent part, has attracted interest to our country and has caused Americans to speak and write about her. Books and articles on Russia keep coming out. The writers, in the majority of cases, know Russia, are fairly well acquainted with the conditions there, but unfortunately they are not always able to place a proper valuation upon the course of events there, which ought to be viewed in the light of the peculiarly Russian historical experience. Mr. Johnson's book forms an exception in this respect, for the abundance and the interest of its material redeems the author's extreme optimism.

"From the point of view of facts, Mr. Johnson's book will undoubtedly take a high place in the ranks of the Anglo-American literature about Russia. The author makes a special study of the Russian liquor problem, and his study is fine, from the point of view of facts. Even in the Russian language there is scarcely such a comprehensive study of the history of the drink question in Russia. All who are interested in this question, which is such an unfortunate one for Russia, ought to read his book."
—The Editor of the *Ruskoye Slovo*.

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"I admire the carefulness with which you have gathered the material for it. It is a most interesting work. There is no doubt that the anti-alcohol movement in Russia and the measures taken are of extraordinary importance."

PROFESSOR J. GONSER, of Berlin,
Secretary Internationale Vereinigung gegen den Missbrauch geistiger Getraenke.

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No. 4

Announcement

FOR several years the editors of The Scientific Temperance Journal have been endeavoring gradually to develop it into a publication designed to give busy readers, and especially leaders of thought, the essential scientific and social facts of the alcohol question.

In furtherance of this policy another step is now to be taken. Beginning with March The Journal will be issued quarterly instead of monthly, and will contain 64 pages instead of 32 as at present.

The new quarterly Journal will contain original articles by well-known American and European medical and social writers, bringing out new facts as they become available by investigation, or so weighing evidence as to enable readers to justly estimate its value and applicability to practical problems of everyday life.

Current books touching the alcohol question, pamphlets, reports, magazine and medical journal articles will be reviewed so that Journal readers will be thoroughly abreast of the latest and sanest discussions of the alcohol question throughout the world.

The subscription price of the new Scientific Temperance Journal will remain at \$1.00 per year; \$1.12 to Canada and other foreign countries. The first number for 1917 will be issued in February.

It is believed by both publishers and editors that this change is in the interest of greater helpfulness to that large number of thoughtful people who welcome authoritative, compact discussions of these facts of the alcohol question that are now becoming generally recognized as the foundation of the entire movement for the abolition of alcohol.

In order to secure the full volume of The Journal it will be desirable to send in subscriptions for the year at once.

New Marksmanship Experiments

CONDUCTED BY PROF E. KRAEPELIN

The shooting experiments described in the following article were carried out with 20 carefully selected marksmen who fired 27,000 shots in sixteen days. A dose of alcohol equal to that in a quart of beer, taken in the morning, showed a detrimental effect on accuracy of aim five minutes later. The most marked effect appeared in the tests made 25 to 30 minutes after taking alcohol, when the average impairment was 3.1 per cent. The effect of the alcohol was less marked when taken after the noon meal, but even here there was an average loss of 2 per cent in effectiveness. In some men efficiency was impaired as much as 10 to 12 per cent without their being conscious of it. As in other similar experiments, most of the men were self-deceived as to the real effects of the alcohol upon themselves.

DR. E. KRAEPELIN of Munich has reported recently the details of the experiments on the effects of alcohol on marksmanship that were carried out in Bavaria in 1908, repeating on a broader scale the earlier Swedish ones that have become so widely noted.

The Swedish shooting exercises showed a very high rate of failures in hitting the mark after the soldiers had taken about 30 to 40 grams (1—I 1-3 oz.) of alcohol. The possibility that all of the conditions of the experiment had not been arranged with sufficient precision, and the limited number of the tests as a basis for generalizing, led Prof. Kraepelin to desire another and more crucial trial. He made this suggestion to the Bavarian Minister of War. It was readily accepted and the experiments were carried out at the Lechfield camp.

Twenty expert and reliable men were selected for the tests and sixteen days were set apart for the experiment, which consisted of thirty series of tests, covering sixteen days, in which 27,000 shots were fired, at a distance of 200 meters (about 217 yards).

The twenty men taking part being under military rule could be effectively supervised as to their manner of life. They lived as uniformly as possible from day to day and were not allowed to take other doses of alcohol than the ones required for the experiment, or to use coffee or

The day on which alcohol was given was followed by one of like conditions in every respect, except that a like quantity of water and no alcohol was given.

The Plan of the Experiments

Every experiment was divided into four test periods, the first of which was followed by the dose of alcohol, or water. The other three test periods followed, one after five minutes, one after 25, the last after 45 minutes. The amount of alcohol given on the alcohol days was 40 grams (about one and one-third ounces), equivalent to about two pints of 4 per cent beer.

Both forenoon and afternoon were used for the experiments; but the results were kept separate, as it was found that the afternoon efficiency in precision was not quite as well maintained as that of the morning, the basis of comparison being always the first of the four periods of the exercise

In Table I, A stands for the first period of the forenoon and B for the first period of the afternoon. Each of these periods was followed by a dose of water or of alcohol. The figures 1, 2 and 3 indicate the results on precision in shooting in the succeeding test periods, at from 5 to 10 minutes, 25 minutes and 45 minutes, after the water or the alcohol was given.

These figures represent the value of the work estimated, not by absolute hits

TABLE I.

Forenoon					Afternoon			
	A	1	2	3	B	1	2	3
Normal days	100	102.2	102.8	102.5	100	102.0	102.5	101.4
Alcohol days	100	100.3	99.7	100.0	100	102.7	100.5	100.8

tobacco, which might interfere with the results.

*This article is based upon a translation made for the JOURNAL of the report from Internationale Monatsschrift zur Erforschung d. Alkoholismus, etc., Oct.-Nov., 1916. XXVI. Heft 10-11.

or misses, but by the proportion of hits and near-hits, reckoned carefully by sections of the field of the target showing where the balls had struck. The first period, as the basis of comparison, is

placed at 100 per cent, the others in percentages of this.

General Results

On the normal days, the results of both forenoon and afternoon show that the precision first increases, then slightly declines. Thus in the second and third periods there was the customary increase found in all precise tests of efficiency soon after the start and attributed to the effects of the exercise, "getting warmed up" is the term sometimes used in America. It is to be distinguished from the gain in skill that results from long practice of any art. It is no doubt a mental effect, the result of intensifying concentration. After a period of sustained mental application the mind relaxes, which may account for the decline in the fourth period, which is attributed by the experimenters to fatigue.

Forenoon Work

Comparing the forenoons of the normal and the alcohol days, period by period, we find, on the alcohol days, only a fractional increase in the first period and a drop in the second, while the third is the same as the first. The work of all of the periods following the taking of the alcohol is below the corresponding records of the normal days. The gains that were to have been expected from exercise, in accordance with the universal rule, have been more than offset by the alcohol. This is shown even more clearly in Figure 1.

Afternoon Work

The picture for the afternoon is a little different, and if we were to judge merely by the figures we might say that here better work was done in the first period following the alcohol (five minutes after the alcohol was taken), but we have to consider here the matter of the midday meal. The alcohol at this time was taken on a full stomach, and might

be expected to pass more slowly into the system than when taken on an empty stomach, as it was in the forenoon. So that at first only a small part of the alcohol became effective. There would still be, however, the slight gain of seven-tenths of 1 per cent over the water days to be accounted for. Prof. Kraepelin thinks it may have been due to a slight removal of embarrassment, an effect which alcohol without doubt has, and

which is in line with its relaxing effect upon inhibition. But why this should occur in the afternoon in conjunction with a meal and not in the forenoon, Prof. Kraepelin does not suggest. This slight improvement occurred with only seven of the men. Except in the



PROF. E. KRAEPELIN

few this slight improvement at the beginning was reversed in the next period. In the last period there was a small improvement only twice.

With eleven men there was nothing but impairment from the start. On the average this impairment amounted to 4 per cent in the first five to ten minutes; with some men to 10 per cent. Where there was improvement in this period after alcohol, it amounted usually to only one-half of 1 per cent, but occasionally to 7 per cent.

In the following period 25-30 minutes after taking the alcohol, the diagram shows there was a sharp drop in precision, an average diminution of 2 per cent from the record of the non-alcohol days. Seventeen of the men showed a decided impairment which ran from 6, 7, 8, 9, to even 12 per cent.

At the time of the last period, 45 minutes after the alcohol was taken, the impairment in most cases had begun to subside. On the average it was still 3 per cent, but with some individuals 10 per cent.

The general average of impairment in

precision for the forenoon by periods Prof. Kraepelin gives as: first period, 1.9 per cent; second period, 3.1; last period, 2.5. For the afternoon there was an increase in the first period of 0.7 per cent; second period, decrease 2 per cent; third period, decrease 0.6 per cent.

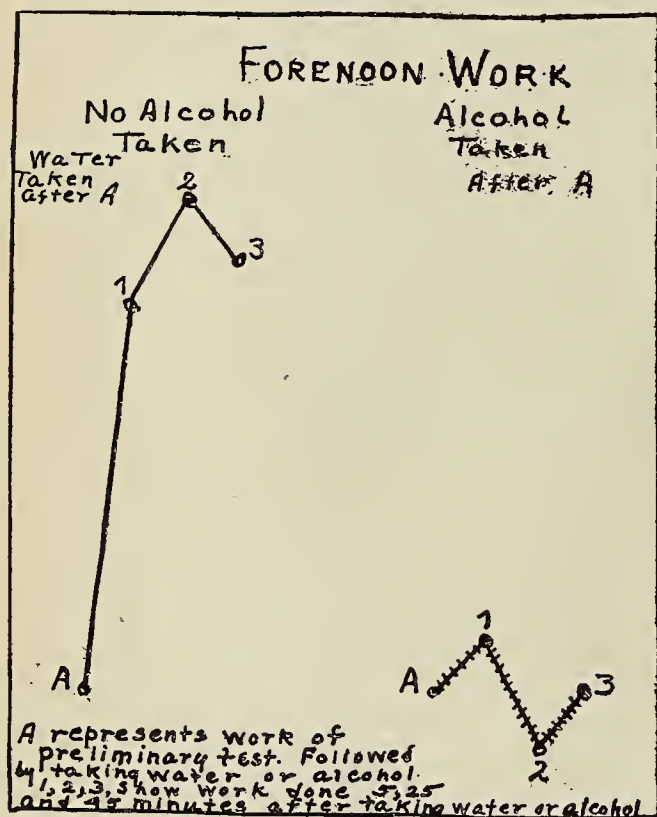
Only two of the men showed nothing but a favorable result from the alcohol, and that amounted to only about one-half of 1 per cent.

Self-Judgment Impaired

"It was especially interesting to note," says Prof. Kraepelin in summing up his account, "that in these shooting experi-

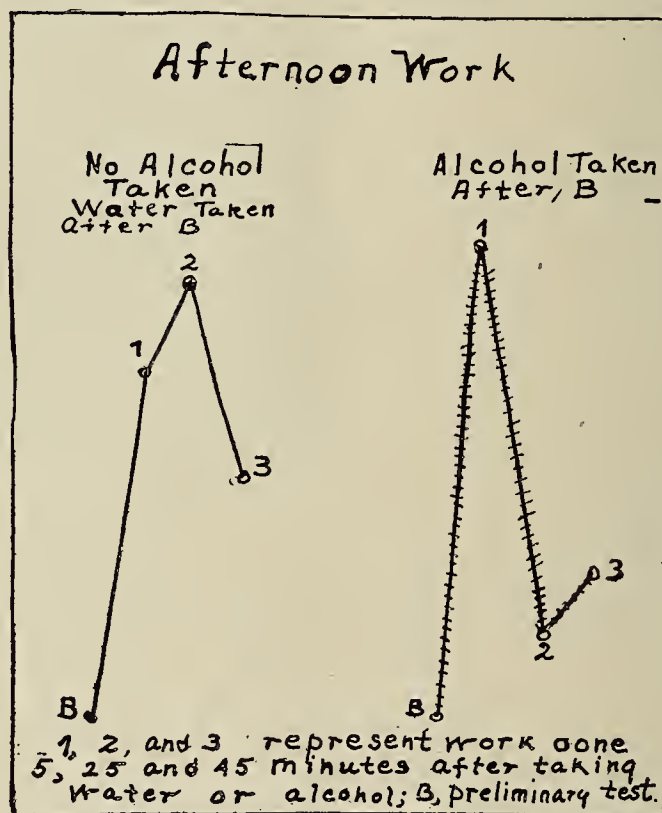
Ten of the men declared when questioned that they would rather have the alcohol when they were to shoot and the majority of these were badly influenced by it. Precisely in this self-deception which concealed from them the impairment of their ability lies, of course, a special danger.

"The results of this experiment may throw a certain amount of doubt upon those of Bengt Boy, but the demand for great accuracy must be emphasized. The relatively small number of mis-hits here was probably due to the fact that the men were excellent marksmen. One



ments we met distinctly again the well-known alcoholic delusion concerning one's own abilities. When questioned concerning their impression of how well they had done, five believed they could shoot better under the influence of alcohol, three had observed an impairment and the others could give no opinion. Of the first group, three actually had shown an improvement at the start, and one even at the close of the experiment. At the maximum of the effect all three had done worse. The other two declined in precision as much as 10 per cent.

"The second group had, as they thought, shot worse under the influence of alcohol, but in one case only a very little. The others had been unaware of the very marked impairment of their work, reaching as high as 10 per cent.



must admit that efficiency less perfected by practice is more susceptible to the impairing influence of alcohol.

The Experimenter's Conclusions

"Correct marking of the scores is only possible when the individual subject is considered. It is nevertheless not an insignificant fact that even the small amount of 40 grams of alcohol may cause impairment of precision in a number of expert marksmen of long practice, amounting to 10 and even 12 per cent, without their being conscious of it.

"It is to be noted in that connection that the conditions in war, aside from the occasional larger amounts of alcohol obtained, often must be much more unfavorable than with the subjects of our experiments. Loss of sleep, over-exer-

(CONCLUDED ON PAGE 108)

The Wine Question

BY DR. GAUVREAU, MONTREAL

It seems likely that in the near future, in certain sections at least of the United States, a strong effort will be made to save wines and beer from prohibitory legislation. Attempts in respect to beer have already been made and defeated in some of the prohibition states.

In view of this fact, it seems pertinent to republish here the portions relating to these questions of a thoughtful address recently delivered by Dr. Gauvreau, Registrar of Quebec College of Physicians before a distinguished audience of 2,000 persons, including many priests and high officials of the Catholic Church.

Conditions in the United States are sufficiently like those in Canada to make his discussion of the question worth serious consideration. Dr. Gauvreau's treatment of the wine question only appears here. The beer discussion will appear later. The translation is from *La Temperance*, which published the address in full. (Dec., 1916, Vol. XI, No. 7.)

THE problem of wine is only an incidental one that has come to be grafted upon that of alcohol. Properly speaking, in the social sense there is no wine question in Canada. In 45 years, from 1869 to 1914, the per capita consumption of wine has made almost no increase. In 1869 it was 0.115 of a gallon, in 1914 it was 0.125.* In the province of Quebec there is even less of a wine question than in the other provinces. Our province has no vineyards, but it is surrounded by those that have or that are proposing to have them: Ontario, British Columbia, and the United States at the south. Our people would rather eat the grapes fresh than to throw them into the vats. There are only a few who drink wine and those who drink it habitually do not use that produced in this country. The native wines are of inferior quality, contain a high percentage of alcohol, are indigestible and sharp to the taste. When our good people satisfy their fancy to drink their own wine they do it to have a change of excitants or to prolong the effects that they seek. It is certain that the drinkers of Canadian wine do not seek anything else but the effects of the alcohol.

It is impossible to separate the two classes, those who drink imported wines and those who drink the native ones. In any case, taking the statistics as a whole, they show that the wine consumption of Canada in 1914 was 0.124 of a gallon per capita. In practice, as one may well suppose, the consumption is not so equally divided, and looking at it more closely it would perhaps be found that it is mostly

chargeable to the habitual wine drinkers. Furthermore, the wine alcoholics are not especially mentioned in the statistics of the Quebec boards of health. At consultations, for example, oftener than one would think, are patients who tell the truth in affirming that they never take alcohol to excess, or that they take it only rarely, and yet on examination by the physician they show all the marks of established alcoholism. Do not be surprised, then, if the doctor says: Stop taking wine at the table. The doctor has touched the spot. The patient, without perceiving it, has reached the first, second or third degree of wine alcoholism. Without doubt the doctor had called it, and truly, a case of arthritis, but he found in the habitual use the patient had made of wine with his meals the paramount reason for the arthritis.

Nevertheless, it is an undeniable fact that habitual wine drinkers are a very small minority in the province of Quebec. And I ask you to carefully consider, and especially to verify this last statement. Count up in every parish of the province, and especially in those of the cities, the number of families, even among the rich, who drink wine habitually. Their small number will surprise you. But this small number is recruited from the classes of most prominence. For the most part they are the educated people who have gone to Europe to finish their studies and they have acquired the habit of drinking wine with their meals. They have followed the drinking fashion.

It is upon the tails of their respectable coats that the agents and profit-makers from alcohol hang. If we did not have in this province a few hundred habitual wine drinkers, or if these habitual drinkers would generously of their own accord make a small sacrifice, the question of al-

*While the consumption of wine in the United States is higher than that of Canada, the statements of Dr. Gauvreau as to the relatively slight natural consumption of wine are equally applicable to this country. The per capita consumption in the United States in 1850 was 0.27 gallons; in 1915, 0.32 gallons. It has never exceeded 0.67 gallons.

coholism would be quickly settled, the problem of alcohol would be speedily solved. There is no sensible person today who has any doubt of the necessity of suppressing alcohol.

A certain number, again, are partisans of beer, because the interests are active and exert themselves.

Many believe in the necessity of granting full freedom to wine because those who use it without abusing it are people of respectability. In mixing the question of wine with that of beer the interests are aware that they are mixing the cards. They know that they are silencing the good people who are indirectly interested in the cause of alcohol, solely because these good people are living adherents of the cause of wine. The day when these habitual wine drinkers declare, "We will have no more of it," will see alcohol felled.

Reasons Advanced in Favor of Wine

The general reasons advanced in favor of wine fall under four chief heads:

1. Wine satisfies a taste that is innate in man.
2. Wine is a hygienic drink.
3. Wine is an antidote for whisky.
4. Let temperate people drink their wine.

The Question of Wine as Satisfying a Natural Liking

In certain countries this may be; but surely not in ours. And how could this be? What peculiarity or what heredity can there be for wine in the province of Quebec where there are no vineyards, where the immense majority of the people in the country do not even know the color of grapes, vines are not grown, and no one ever drinks wine except by accident.

The innate liking for a food or a drink, where it exists, is due more to the soil and to the products of the earth than to any universality of the custom. With us there is no universality of the custom. The soil is unsuited for the cultivation of the vine, or at least very few people cultivate it. The industry is yet to be created. The physiological progress of the race assuredly does not demand the introduction of wine into our diet.

No one will deny that the pure French-Canadian type comes from the most sober of our population. There is no equal in physical strength and intellectual

power to the totally abstinent French-Canadian who remains faithful to the temperance habits of his parents and who finishes his education without deviating from his habits.

No one, again, has thought of pretending that the habit of taking wine contracted in Europe, or by contact with European groups among us, by a small number of our children, may be a difference in the development of their faculties. No one with common sense would claim, I imagine, on any score whatever, that the habit of drinking wine, even in moderate doses, is due to the good birth, good training, "good breeding," as the English say, of the French-Canadian race.

Why, then, wish to create, by a law in its favor, universality of the custom? Why, in spite of the conditions of producing it, climatic and social, wish to give to the race a new factor of abuse, if not of degeneracy? Why create a new desire where none now exists? Why depart from the instinct of the people, who neither desire wine nor seek it, except to satisfy a depraved instinct, that of alcoholism, on the reformation of which all the world is now intent? Why wish to promote a new education, which can have no other outcome, under the circumstances in which we live, than of giving the people a new impetus towards alcoholism? Because the adherents of wine answer, "Wine is a hygienic drink."

The Claim That Wine Is a Hygienic Drink

A vicious circle. What does it mean? Listen to each of the claims of these gentlemen. We shall be in a better position to draw conclusions.

We have made sufficient concessions to wine not to be taxed with intolerance toward it. But as the term hygienic drink has been applied equally to beer it is important to make an authoritative reply that will serve in both cases.

The answer to this argument can only come from science, and in spite of the fact that it may be tiresome to hear a somewhat long quotation, will you permit me to turn to a treatise on alcoholism by Triboulet, Mathieu and Mignot to prove that neither wine nor beer are hygienic drinks, and that besides, the drinks called hygienic are not indispensable to a normal regimen.

There Are No Hygienic Alcoholic Liquids

"It is customary to divide all the products of the industry, great and small, into two groups: the fermented drinks called hygienic—wine, beer and cider; and the distilled liquors—spirits and liqueurs.

"The distinction deserves to be continued if one wishes to denote only the difference of composition and of activity in these products, but it is not permissible to abuse the word hygienic, as has been constantly done and is still done. There are no hygienic alcoholic liquids. Daremberg has repeated this in a number of articles; Débove has expressed it plainly as his opinion and has proclaimed it many times in his lectures.

"The facts must be stated quite otherwise to avoid the fallacies that perpetuate the problem. We must get into the habit of placing the liquors in a scale according to the degree of their toxicity. At the head will come the most poisonous, the strong liquors, the less strong, and those of average noxiousness. Naturally, if one continues the series he comes to those products that are slightly poisonous (sour wines and grape-water).

"The distilled liquors offer no daily utility for the human organism.

"The drinks called hygienic are absolutely not indispensable in a normal regimen. Thus one reaches a conclusion that represents the definite opinion of a large number of scientists and hygienists in different countries. Alcohol is not a necessity; it is a luxury.

"There is an expression against which all physiologists and all physicians should raise a protest, one that has become almost classic, and is still current, the expression **hygienic dose** or the dose **permitted by the hygienists**.

"There is no hygienic dose. . . . We see every day the dose that does harm and so much of it that, as a physician, I demand to know the dose that does good."—Triboulet.

The Quebec Medical Manifesto

These statements are all confirmed by French-Canadian scientists.

All are acquainted with the scientific manifesto of December 3, 1912, issued by the Medical Society of Montreal on the

subject of the use of alcohol, whether wine or beer. This statement, approved by 775 doctors of the province of Quebec, though received with indifference by some of us, is yet to meet with contradiction among doctors. A conspiracy of silence may have been maintained about this announcement in certain circles. A scientific contradiction has never been attempted. Not a university professor, not a practitioner has declared, either over his signature or in public, that the expression of opinion made by the Medical Society of Montreal concerning alcohol, beer and wine, did not represent the universal scientific opinion. And what was the announcement? I quote it complete:

1. *Contemporary science maintains, with reason and proof to support it, that alcohol, a poison especially to the liver and to the nervous system, is truly a dangerous substance, from which men should absolutely abstain.*

2. *There are no hygienic drinks among alcoholic liquors.**

3. *The extremely moderate use of one of the fermented drinks may not always injure certain individuals, but it is never truly healthful.*

4. *To be in the most complete possible possession of our faculties and of our natural powers at every moment of our lives we must be rigorously abstinent.*

Who Should Instruct Legislators

Here naturally arises a question: Who should inform the law-makers as to the physiological needs of the nation? The nation itself? Very well. In any case, the nation by its soil, its climate, its ancestry, heredity, habits and instincts proclaims that it has no need of wine, however inoffensive it may be, to preserve to the race the red blood of its ancestors. It sees rather in this new habit which some would impose upon it, a danger for its children among whom, unfortunately, there exists an hereditary predisposition to alcoholism created and engendered by a too free use of alcohol under other forms for three centuries. The nation must resist, and it must resist without

*Alcohol is alcohol either in whisky or beer. It is nonsense to claim that beer is a hygienic drink. It is drunk chiefly for its alcoholic effect, and if the alcoholic effect is produced, the danger of alcohol exists. . . . If beer does not intoxicate or produce any alcoholic effect, what becomes of the "racial craving for stimulants" which it is said to satisfy?—E. L. Fisk, M. D., Atlantic Monthly, Feb., 1917.

compromise, the evil that it combats. It must without subterfuge or rest overtake the enemy which it pursues and which evades it. It demands the prohibition of wine.

Who must instruct the law-makers upon the physiological needs of the nation? Who but the scientists of the nation instructed by universal science?

National science is in accord with universal science when it declares that there are no hygienic drinks among alcoholic liquors, and when it beseeches the authorities not to create, by making an exception in the law, a new, artificial need, the consequences of which would be disastrous to the strength and vigor of the public health.

Who should instruct the law-makers upon the physiological needs of the nation? Should it not be, especially for us, a young people, the experience of other peoples? Now the experience of other peoples is unanimous in declaring that the third claim of the defenders of wine is false, and that wine is not an antidote for spirits.

The Question of Wine as an Antidote for Spirits

To answer the second argument of the defenders of wine we invoked the testimony of science. To answer this claim let us call in the testimony of experience.

And first, do people get drunk on wine? From the time of Noah to our day experience has only too often proved that they do to permit contradiction. But this is the least of its faults. The habitual use of wine might not have, in our country, any inconvenience other than that it could not be poured out at a banquet attended by fifty people of different conditions without some one among them using it immoderately, in such a way as temporarily to lose his head—an inconvenience to be noted. It might at the same time be advantageous in bringing back to the theory of total abstinence the people who until this proof favored the sale and free use of wine and beer. I might cite to you names, and those of very distinguished people.

Does one alcoholize himself with wine? I revealed to you just now certain secrets of the consulting room, not being able to rely upon Canadian statistics. French statistics will confirm my indiscretion.

In the first place, let us recall that alcoholism is chronic poisoning which results from the habitual use of alcohol, even when it does not produce intoxication, and whether it is taken as fermented or distilled liquor, or in whatever form.

In France, says a statistical report dated 1893, 20 per cent of the alcoholics interned became intoxicated exclusively with wine, beer or cider, drinks called hygienic.*

That wine is not an antidote for whisky is proved easily enough by referring to the fact that cities like Cettes, Saint-Etienne and others situated in the midst of the wine region, are of all the cities of France the most alcoholized. The proof of this is incontestable, but would detain us too long. We prefer to build up our thought by the conclusive national experience of Belgium. Confident that wine would drive out the stronger liquors, the Belgian Minister of Finance relieved wine in casks from taxation. Many large factories ordered from France good ordinary wine and sold it by the glass to their workmen at cost price. The experiment was promptly conclusive. The workmen welcomed the wine warmly and drank it with abandonment; but they did not drink less alcohol, and absences on account of drunkenness, instead of diminishing, increased. The purchases of wine were stopped.

Triboulet, who reported this fact, concluded: From the hygienist point of view the reduction of the taxes is only a sort of premium put upon unlimited consumption of fermented liquors, upon alcoholism, by drinks officially called "hygienic."

To return to France, if wine were an antidote to alcoholism, the French government would have profited by it in reducing the ravages of strong drink. Here is a poster prepared by the French Academy of Medicine and put under the eyes of the people in all the communes of France. [Dr. Gauvreau here quoted the familiar poster issued in Paris in 1903 by the General Administration of Relief of the Poor in Paris.

Alcoholism; Its Dangers

It was drafted by Professor Débove, Dean of the Faculty of Medicine, and Dr. Faisans, physician to the Hotel Dieu, and was entitled "Alcoholism: Its Dangers."

*Forel: *Statistiques de Elikon*, 1893, quoted by Triboulet, Mathieu, and Mignot, *Traite de l'Alcoolisme*, Paris, 1903.

Among its warnings were the following:

"Alcoholism is chronic poisoning resulting from the habitual use of alcohol, even when this is not taken in amounts sufficient to produce drunkenness. . . .

"The habit of drinking spirits leads quickly to alcoholism, but the so-called hygienic drinks also contain alcohol; the only difference is one of quantity; the man who daily drinks an immoderate quantity of wine, or cider, or beer, becomes as surely alcoholic as the one who drinks brandy."]

One sees that the government does not consider wine an antidote for alcohol. Instead of saying simply, the hygienic drinks are harmless, it proves that they also contain alcohol; the only difference is the dose. It states emphatically that even wine may lead to alcoholism. It does not say to the French: "Drink wine freely and without fear." But it says: "Be moderate in the use of wine."

If wine is an antidote for alcohol, why are they founding even in the wine-making countries so many total abstinence societies? Why, even in Spain are so many doctors completely stopping the use of wine in their treatment? Why are so many physicians themselves among the total abstainers? Why always in Spain are so many educated men continually trying to diminish the ravages of alcoholism by discouraging the wine drinkers?

Why did the Emperor of Germany say in a lecture in 1910 when speaking on this subject: "If you will renounce alcoholic liquors you will aid greatly in the moral elevation of the country?" And why did this imperial discourse excite to exasperation the anger of the German brewers?

If wine is an antidote for alcohol, why did the Italian government see itself forced to take up preventive measures against alcoholism?

Why did the French government recently, in a poster similar to the one I showed you, cite definitely the daily dose of alcohol which all good soldiers must not exceed?

No, unwelcome though it be to all theories present, past and future, wine never has been and never will be an antidote to alcoholism. Every country that suffers from alcoholism must fear wine and class it with distilled liquors in safe-

guarding their people. To close our gates to spirits on one side and to open them wide to wine on the other, is exchanging one evil for another; it is satisfying a passion that we wish to suppress by appealing to another which leads to exactly the same result.

It is alcohol that we complain of. Alcohol is our enemy. Let us not covenant with that which contains it. The Trojan horse is always to be feared.

The Plea to Let Sober People Drink Their Wine

In this chapter of arguments in favor of wine careful consideration is always given to the name of liberty. I will not linger here. The argument which in itself applied to a small number of people has a certain value, becomes a feather in the cap of those who profit by alcohol, and of their tools, who, positively, only seek to prostitute the use of wine and beer in order to better attain their ends.

We certainly do not wish, practically speaking, to prevent the small number of importers of wine from having it. We only wish to prevent the masses, the people who drink only wine, from being the double dupes of the exploiters. We wish to prevent the latter from creating new likings, from flattering the passion for drunkenness and the evil of alcoholism by the aid of drinks all the more harmful and dangerous, as apparently they would carry a fine name when in reality they would be nothing but wine. France, Italy and Spain do not produce enough wine to meet the demands of their subjects. Do we think it possible to attract to us at popular prices enough wine to satisfy among our people a custom like that of the French? Let us drop the idea. It is cherishing the most dangerous kind of utopias. To admit the free sale of wine would be in a way to put a premium upon adulterations.

The prohibition of wine without doubt will have the effect of making more difficult access to the casks of France, Spain and Italy. But it will not absolutely prevent those who believe wine a necessity from receiving it. The distance for obtaining it will be long, and the obstacles numerous. The difficulty of obtaining it will be greater. That is what we want.

The powers of the provinces are limited in the matter of prohibition. They may prohibit the sale, wholesale and retail, within the province. They cannot prevent the manufacture, exportation or individual importation. When the time comes to discuss national prohibition we will meet the problem and discuss it on its merits.

For the present it is enough to erect high barriers against the abuses. The most important of these barriers is that of the province of Quebec. We demand that it shall be as hermetically sealed as possible, without crack or fissure, without even a door through which a stream

of alcohol or wine can trickle. Individual importation always will be permitted and that is enough, it seems to me, to assure to sober people the free use of their wine. And even if individual importation should become an impossibility, provided the scientific and religious uses are assured, shall we not be able to count upon the **spirit of sacrifice** in a small number for the sake of the good of the community? Have we not a right to expect national adaptation on the part of all the European elements which, in return for the high intellectual culture that they bring to us seek and find here in our country well-being and peace?

* * *

Sign Posts Toward Preventing Feeble-mindedness

THE special report of the Virginia State Board of Charities and Corrections on feeble-mindedness in that state like the report of the Michigan Eugenics Commission a year ago, indicates that alcoholism is in a measure responsible for the feeble-mindedness that so largely thwarts efforts in most states to deal satisfactorily with anti-social classes—the criminal, the insane and the pauper. The Virginia report says:

"We need to know more about the effects of alcohol and syphilis. It seems now that these actually produce changes in the germ cells which tend toward mental deficiency. *The plan for prevention should be along lines of elimination of alcohol and all venereal diseases, and the reproduction of the feeble-minded*; [Italics ours. Ed.] because it is certain that a large percentage of feeble-mindedness (we do not know exactly how much) is hereditary."

Virginia has begun the elimination of alcohol by prohibition of the alcohol traffic which went into effect November 1, 1916. This should help reduce the other cause named by the report, syphilis, since it is well-known that a large proportion of the cases of this disease contract it while under the influence of alcohol. Specific evidence of this in Virginia comes from Surgeon Riggs' article referred to on page 105 of this number.

Numerous charts in the report show the frequent interrelation of alcoholism, insanity, feeble-mindedness, epilepsy and syphilis. One of the charts is reproduced herewith (Fig. 1).

"The central mating," says the report, "is of an insane immoral woman (1) a one-time resident of the segregated district—and an alcoholic man (2) [His father (3) was also an alcoholic. Ed.]. They have had five children. The eldest (4) died of 'brain fever' at 13 months; the second (5) is feeble-minded; the third (6) is epileptic, member of the epileptic colony; the fourth and fifth (7 and 8) are in an orphanage—they are very young.

"Note," says the report, "that two generations of alcoholism on the paternal side, combined with insanity and neuro-pathic tendencies on the maternal side, resulted in feeble-mindedness, epilepsy and brain fever."

Figure 2 shows three generations of another family. Here is the mating of an insane woman, daughter of an alcoholic, with an alcoholic man. Two of their twelve children (9 and 10) died in infancy, one (1) is normal, the mental condition of six (2, 3, 4, 5, 7, 8) is undetermined, but one of these is in an institution. Three (6, 11, 12) are feeble-minded, number 6 being a case of high-grade feeble-mindedness. "This," says the report, "is an example of insanity and feeble-mindedness springing from the same general source."

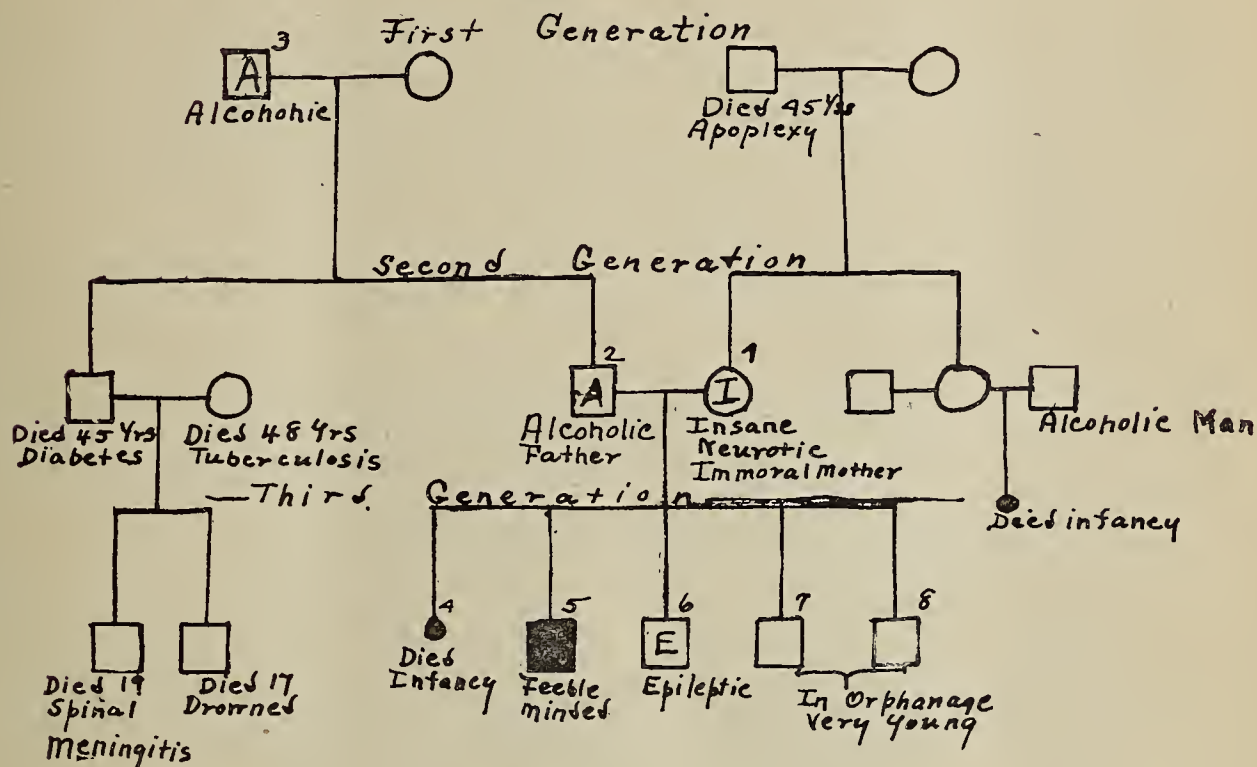
A careful study of 100 jail repeaters selected at random in one Virginia city showed that 58 per cent of the drunkenness cases were mentally sub-normal and 78 per cent of them criminals.

One might argue from this, says the
(CONCLUDED ON PAGE 103)

CHILDREN OF ALCOHOLIC FATHER AND INSANE MOTHER

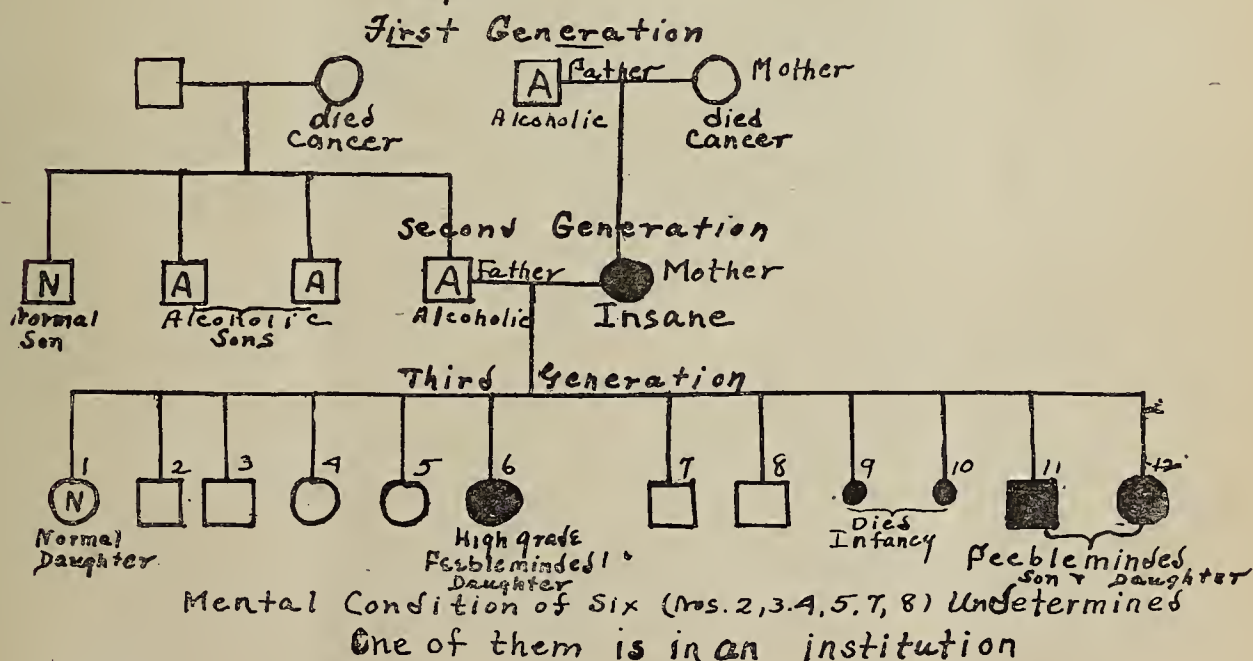
(See article page 94)

Fig. 1.



The father and one grandfather of children 4, 5, 6, 7, 8, were alcoholic. The mother (1) was insane.

Fig. 2.



The father of these 12 children was alcoholic. Their mother was insane, the daughter of an alcoholic father.

The Apostle of Temperance—Father Mathew

BY E. L. TRANSEAU

This article closes for the present the series of sketches of too-little known men and women who have contributed significantly to temperance progress in their respective countries. The nations represented have been Russia, Finland, Norway, Sweden, Germany, England and now Ireland.

ONE June day in 1849 New York city turned out in gala array to welcome a well-known visitor from abroad. The City Common Council and Board of Aldermen sent reception committees, the Mayor extended an official welcome. Bands added notes of festivity. Commodore Vanderbilt entertained at luncheon a company of distinguished guests who were on their way down the harbor to greet the visitor before he landed.

It was no representative of a foreign government whom New York thus officially welcomed, no great statesman, titled nobleman or renowned conqueror—just a simple Catholic priest, Theobald Mathew, from Ireland. But he bore a title—"The Apostle of Temperance."

From the reception addresses given that day by the representative of the Common Council, the president of the Board of Aldermen, the Mayor, from the eager throngs who lined Broadway when the procession passed to the City Hall where it was reviewed by the Mayor and the distinguished guests, came tribute to a welcome friend of humanity.

"There is not a town in the United States," said the well-known philanthropist, William E. Dodge, "where your name is not familiar as a household word. You come as a conqueror, but not with the spoils of the battlefield; your victories are moral—achievements over vice. You have overthrown intemperance.

"You will find your fellow-countrymen among us in places of trust," continued Mr. Dodge, "because they have taken the temperance pledge at your hands."

Four years before Mr. Dodge had been in Ireland. He had witnessed the work of Father Mathew. Seeing the great poverty of the people he had urged them to come to America, but to take Father Mathew's pledge before they came. Many had come and had found the pledge a passport to employment and prosperity.

Even on this day of his welcome to America, the people flocked to Father Mathew to take the pledge. Out from

the dense crowds there came his own countrymen beseeching him to pledge them against alcoholic drinks, and as they knelt before him they repeated after him the simple promise "to abstain from all intoxicating drinks and to discourage intemperance in others."

Theobald Mathew was born of a titled family, the Earls of Llandaff, at the great house of Thomastown, in Tipperary, Ireland, on October 10, 1790. His mother, like most mothers of the land, wanted one of her sons to be a priest and when she referred to the fact rather sadly one day in the presence of his older brothers who had disappointed her in this respect, Theobald Mathew volunteered on the spot to be the one to meet her wishes.

At 17 he entered college to prepare for the priesthood. The story goes that he did not stay long, for his love of hospitality led to his giving a feast to his fellow-students, which was against the rules. The fact that at that time he was not an abstainer and that feasts without alcoholic liquors were practically unknown, may explain why it was against the rules and ended his college career.

We soon find him a priest in the poorest of the poor districts in Kilkenny and afterwards in Cork. Here he became remarkable for his confessional to which the people came in such numbers that he was kept confined in the close air nearly all the hours of the day. He could not turn them away, and he began very early in the morning so that the workmen on their way to work could come for spiritual assistance.

It was this power over the people that attracted the attention of a Quaker who came in contact with the young priest through their mutual interest in the Cork House of Industry, or workhouse, which was always filled with the wretched victims of vice and drunkenness. When a particularly bad instance of ruin caused by drunkenness came before the board of which they were both members, William Martin, the Quaker, would turn to Father Mathew and say, "Oh, Theobald Mathew, if thee would only give thy aid

to the cause, what good thee would do for these poor creatures!" Or, again, "Oh, Theobald Mathew, thou hast a mission from God to do this work."

To the importuning of William Martin was added a vision one night as Father Mathew sat alone in the church about midnight, having waited late in his confessional for working people who could not come in the day-time. His former associate in the little friary in Cork, who had been dead several years, seemed to stand before him urging him to preach total abstinence.

Still he waited long before he could be sure that he was called to let this take the place of the pastoral work in which he was so singularly successful. Finally, while he was on his knees in prayer, the answer came to him, so strongly and clearly, that he knew there was no mistake. He sent at once for the Quaker, who was not at all surprised at the summons. This young priest with his robust health, fine breeding, good looks, charming personality and heart full of love for humanity, could do great things for the cause the Quaker had especially at heart, and William Martin believed the time had come.

A society was formed. Theobald Mathew was the first name signed to its total abstinence pledge. It was followed by 60 others the same night. In less than three months he had given that pledge to 25,000 people in the city of Cork alone. In five months he had enrolled 130,000. In five years from the night he sent for William Martin he had 3,000,000 names.

At first he did not go out of the city. The people came to him from miles

around; from Kerry, Waterford, Limerick, Clare, Tipperary and even Galway, to this wonderful man who could cure drunkenness. Those who could afford it, rode; those who could not, tramped the weary miles carrying their little bundles.

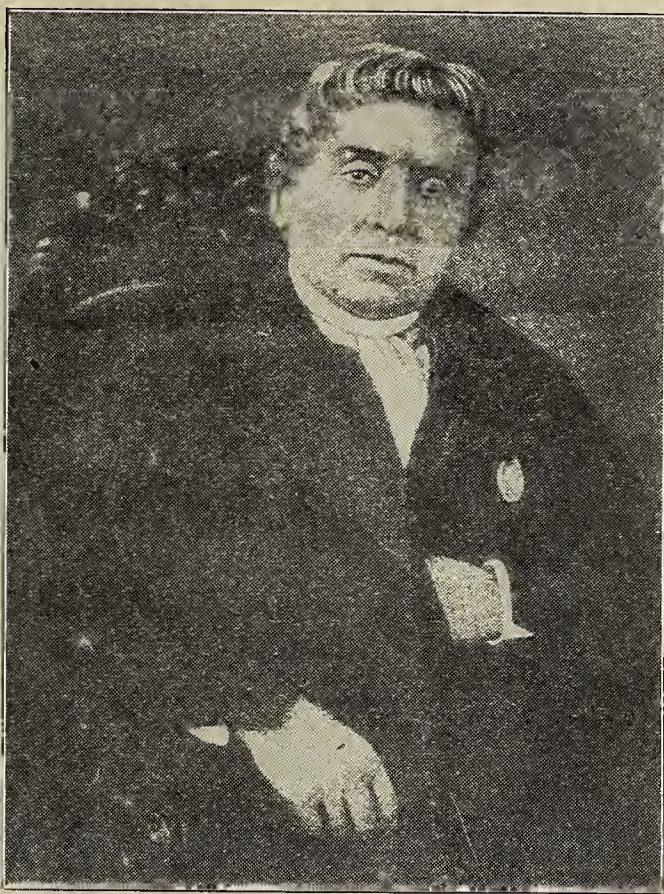
All day long in the little parlor of his two-room house in Cork he received the pilgrims to this Mecca, administered the pledge and in some way found the means to feed the hungry multitudes, for he would not send them away hungry.

Later, when he went out through the cities of the country, the same scenes were enacted, the people flocking in from the surrounding regions until the roads were black with them. In four days in Limerick he signed 150,000. The city was choked with people and all provision for handling them was swamped. But it was not a pleasure-seeking or a mischievous crowd. They had but one object: to get to Father Mathew, to kneel before him and be cured of the sin of drunkenness.

The scenes were repeated until he had covered Ireland, the Protestant north as well as the Catholic south, for he drew

no line at creed or party and his love and tact and sincerity won him his way everywhere.

There is abundant evidence of the results of his work. It was not to be expected that all of the five millions who took the pledge would keep it, but enough did so to cut down the excise on spirits nearly a million pounds sterling, to empty many public houses, to cause many distillers to go out of business, and to change the appearance of the people. This meant sufficient public sentiment to



THEOBALD MATHEW
1790—1856

have sustained these results for a long time had not other influences, as was the case a little later in America, come in with a nation-wide sweep to absorb public attention.

The very magnitude of Father Mathew's movement drew in an undermining element. His great organization was laid hold of for political purposes in spite of all he could do to prevent it, and the fine enthusiasm became embroiled in political strife. Worse still was the famine which destroyed hope where it did not kill and drove the survivors by thousands from the desolated lands. No man of Father Mathew's sympathies could go through three years of such an experience without being impoverished and physically exhausted, because he could not refuse to the starving who surrounded him the food he needed to sustain the energy he expended in striving to obtain help and distribute the supplies that came through his solicitation. As the famine waned, he had a stroke of paralysis.

It was after this, when he had somewhat recovered, that he came to America, and all this the people who welcomed him knew as current history. They understood what he meant when he referred to his infirmities which prevented him from making many public addresses. Yet during the fifteen months of his stay he visited 25 states, administered the pledge in over 300 cities and towns to more than half a million people.

The results here might have been even greater had there not occurred that strange interweaving of intense struggles against alcoholism with great na-

tional and political struggles that continues to today. Almost on his arrival Father Mathew was importuned by the abolitionists to take sides with them against slavery and to use his influence with those of his fellow-countrymen here who were inclined to side against the negro. But he had but one mission and he tried to keep solely to that and to steer clear of political factions. In the intense state of feeling, that proved to be impossible. The abolitionists denounced him because he would not repeat the declaration he had made years before against slavery; the Southern leaders denounced him because he had made it. Neither party was satisfied and his work was handicapped accordingly.

Father Mathew's last days were harassed and saddened both by debts which he had contracted in carrying on his good work and by the recurrence of drunkenness in his country. Though oppressed by a sense of defeat, his great work was in no sense a failure. The more solid foundations we are building today have a wider appeal and more earnest sympathy, especially among the Irish race, because Father Mathew aroused such a phenomenal desire to escape from the bondage of alcoholism, showed the extent of it, the misery and needlessness of it, and the joy of escape from it. As a movement it lacked permanency like that of Seling in Germany, because it was not based upon and accompanied by the thorough work of education and organization which are necessary to conserve results and to carry an old impulse and enthusiasm over into the needs of a new time, while leaving untouched the ever-present temptation to drink.

* * *

THESE THINGS SHALL BE

These things shall be! a loftier race
Than e'er the world hath known shall
rise
With flames of freedom in their souls
And light of knowledge in their eyes.
They shall be gentle, brave and strong
To spill no drop of blood, but dare
All that may plant man's lordship firm,
On earth, and fire, and sea, and air.

Nation with nation, land with land,
Unarmed shall live as comrades free;
In every heart and brain shall throb
The pulse of one fraternity.

Man shall love man with heart as pure
And fervent as the young-eyed joys
Who chant their heavenly songs before
God's face with undiscordant noise.

New arts shall bloom of loftier mould,
And mightier music thrill the skies,
And every life shall be a song

When all the earth is paradise. —J. Addington Symonds.

The American Immigration Problem and Drink

BY CORA FRANCES STODDARD

From an address in opening a discussion of work among the foreign born at the National Temperance Council, Washington, December 8, 1916.

ACCORDING to the latest census, one person in every eight of the entire population, one in every six of the white population (16.2-3 per cent) was foreign born.

In the past thirty years radical changes have taken place as to the national and racial sources of these new Americans, so that we have to recognize certain differences in our immigration population according to whether we are treating of what is called the old immigration which predominated up to 1883, or the new, the races conspicuous since that date. The old included primarily immigrants from England, Ireland, Scotland, Wales, Belgium, Denmark, France, Germany, Holland, Scandinavia and Switzerland, whence came some 95 per cent of the total number of immigrants up to 1883. On the contrary, in 1907, 81 per cent of the European immigrants came from central, southern and eastern Europe.

More came the last few years before the war from any one of the three countries, Austria-Hungary, Italy, or Russia, than from all the European countries that formerly furnished the bulk of the European incomers.

It is important that in this "breathing spell" in immigration that the war is giving us, we should set ourselves seriously to finding out what we can do to bring to the knowledge and conviction of these new Americans our own experience of a century in dealing with alcohol. I have tried to reduce the problem to "bundles" in the hope that we may find a clue to some specific things we can do now.

The Great Immigration Centers

We need to concentrate our work in the great immigration centers.

Broadly speaking, our work with the largest numbers of new Americans lies east of the Mississippi and north of the Ohio and Potomac rivers. Of the 13,000,000 foreign-born whites in 1910, over 7,000,000 were in Massachusetts, New York, Pennsylvania, New Jersey, Ohio and Illinois. Four-fifths of the recent immigration before the war, mostly from Italy, Russia and Austria, went into the North Atlantic states. These are the

great battlefields of the future against drink.

The Extent of Illiteracy

This being the condition, how can we reach these people? The first thought was naturally to prepare temperance literature in foreign languages. But this idea was speedily confronted with the fact that millions of these people not only do not understand or speak or read English, but **do not even read their own language.**

One in every eight (12.7 per cent) of the foreign-born white population over 10 years of age in the United States in 1910 was illiterate. The four years following the census of 1910 added greatly to this number. In New York the proportion was one in seven; in Connecticut, one in every six and one-half; in Rhode Island, one in every six; in Pennsylvania, one in every five. Inability to speak English was still more prevalent. Altogether, we had 1,650,000 illiterate foreign-born over 10 years of age and 2,900,000 unable to speak English. Of the latter, 2,500,000 were over 21 years of age, and only about one in a hundred of them was attending any school to gain acquaintance with English.

Clearly, the mere distribution of anti-alcohol literature among them even in their own language is to touch only a fraction of the problem.

Reaching the Children

The next suggestion that presented itself was: Emphasize teaching the children in the public schools. There are some millions of them and we can give them American ideals about alcohol which they will take back into the home. Here, of course, is a most important piece of strategic work which ought to be pressed with even greater firmness and persistency, but I discovered that this would not altogether serve. In this new immigration thousands of men have been leaving their children at home in the old world. Of 5,000 wage-earners of the new immigration studied by the immigration commission, three-fourths of the married men had left their children behind them. Practically all the Greeks,

Bulgarians and Roumanians had done this. Italians, Slovaks, Slovenians and Finns bring the children in due time.

Besides, many of these new immigrants form isolated communities of their own, with their own churches and schools, and the temperance education laws do not affect the parochial schools as compulsory, nor do the people come much in touch with American life.

Clearly, we cannot depend too much on the school children in reaching the new immigration—though we might do a great deal more in this direction than we are doing.

But as at present employed, the distribution of literature and the school instruction are incomplete as methods for meeting the problems of the new immigration which, when it arrives, is quite different in educational qualifications and amalgamation possibilities from the immigration type represented by the British, Scotch, Irish, French, Germans and Scandinavians of other days.

The Importance of Immigration to the Drink Question

Careful investigation ought to be applied at once to this pressing problem. I say pressing, for while it is true that as yet only a small proportion of the new immigration have become naturalized citizens as compared with the older immigrants, the **actual numbers** are so much greater that naturalization alone is bringing a vote which, uneducated regarding drink, will largely be a pro-liquor vote. These voters come from countries where until lately drink was as much a part of life as food. Our stupendous carelessness when they get here lets many of them form their first connection with American life through the friendly offices extended to them by the saloonkeeper.

But whether they vote or not, in the first generation unenlightened on this question they help keep up the demand for liquor and by so much encourage manufacturers and legal and illegal sellers of alcoholic liquors.

Reaching Them Through Industry

Probably the most direct and hopeful method of reaching large numbers of these new Americans is through industry. The work already begun of actively enlisting the cooperation of employers ought to be multiplied a thousand-fold.

This means, of course, that the employers themselves have to be convinced that it is worth while and necessary to do this.

Hence, as one of the first steps, cooperation should be sought from the welfare department of every industry that has one, or from the employer himself.

Educating Leaders of Special Races

Secondly, remembering those who do not read or speak English, we must educate their own leaders—priests, pastors, benefit association directors, and editors. This is not a new suggestion to this body, but I believe it absolutely correct in principle. We ought to put standard temperance literature into the hands of every pastor or theological student who serves or will serve foreign-speaking populations, especially in the section where this problem is most pressing. In the foreign-born nationalities coming in largest numbers illiteracy was greatest among the Croats, Slovenians, Slovaks, Ruthenians, Lithuanians, Polish, Magyars, Greeks, South Italians and Hebrews. This indicates the races for which special educational methods must be devised and in which special effort must be made to reach the leaders. Some 4,000,000 of these particular peoples came to us between 1899 and 1909.

The press of the new immigration is said to be at present without much significance in aiding American assimilation, yet these and all editors of foreign language periodicals ought to be provided regularly with articles or paragraphs concerning drink. Even if they do not publish them the editors themselves will in time be influenced by the facts.

The nuns who teach in the parochial schools should be supplied with helpful, practical material that will enlist their own interest and desire to teach their pupils these facts.

Using Special Schools

The help of special training schools for foreign-born young people should be sought. They are preparing leaders. These institutions ought to be not only supplied with good workable anti-alcohol literature, but should be helped in providing special training for their students who will be able to reach their compatriots as you and I cannot.

Cooperation of agencies like the North American Civic League, the Y. M. C. A.,

which are conducting special practical classes in English should be sought. Lessons on alcohol in its relation to everyday activities can be given just as well as lessons on avoiding accidents such as are being used by some of the steel companies. The Henry Ford Motor Company has 2,000 foreign-born employees studying English. There are probably other such schools which should be enlisted in training for sobriety.

In the six principal immigration states named, Massachusetts, New York, New Jersey, Pennsylvania, Ohio and Illinois, there were, in 1914-1915, 217 evening schools, a pitifully small number, but still 217 educational centers. The courses of these schools should include special instruction concerning alcohol.

The Demand for New Expert Literature

We need a new literature on this subject for our foreign-speaking Americans. Consultation should be had with experts in preparing it, so that it shall be not only linguistically correct, but perfectly suited to its purpose and free from unnecessary offense to racial peculiarities. No money should be thrown away in getting out poor or unsuitable literature. For persons who can read their own language articles and leaflets printed in both English and the native language side by side would often be welcome as a means of learning to read English.

Through the school children and especially those in the parochial schools in foreign-born communities, simple, attractive material illustrated by pictures would arouse interest and do as good educational work on this question as it does, for instance, on tuberculosis.

[A plan was here suggested for beginning to systematically undertake the work needing to be done. A committee was later appointed by the National Temperance Council to make the necessary investigations and to report.]

We ought to do this educational work even though about one-fourth of our present immigrants in normal times return to their native lands, to stay permanently. Convince them here of the value of sobriety and we shall so much cut off the demand for liquor, which is one of the mainstays of the traffic. Many of those who return to Europe will carry back the story that sobriety is needed here by those who would "get on." It will not only help their homelands to-

ward sobriety, but will help us in the future as their compatriots come to us with a better understanding of the American viewpoint toward drink.

We have left the new American to the guidance and friendship of the saloonkeeper too much and too long. His own welfare and national safety require that we should begin systematically to interpret to him what sobriety means, why it is necessary, and why it is to his advantage to have the drink traffic ended.

*

ILLITERACY is chiefly a menace in those manufacturing states of the Middle Atlantic division which for ten years—even 20 years in the state of New York—have failed to reduce their percentage of illiteracy and have increased enormously their numbers of illiterates, or, as in the case of Connecticut, have actually retrograded. . . . The percentage of illiteracy in the Southern states has been reduced one-half in the last two decades. . . . Decrease of illiteracy is due not wholly to effort on the one hand and indifference on the other. A state may have a great influx of illiterates and in the sum total put forth a great effort to decrease illiteracy, yet the increase may be constant because of immigration. While in another state with the same degree of effort better results are attained, because there is not a corresponding increase in the number of illiterates coming into the state.—Winthrop Talbot, in *Adult Illiteracy*, Bureau of Education Bulletin, No. 35.

*

POVERTY AND DRINK

THE exponent of the saloon is telling the workingman that it isn't the saloon that makes a man miserable—it's his poverty. This is often true, as has already been stated. It is folly to underestimate the influence of poverty in the creation of drunkards. But you never heard of a saloon that relieved a man of his poverty!

If it is poverty that makes a man miserable, then he might better keep away from the saloon—for the saloon never made a man richer in the slightest degree in any particular. It is a striking fact that the saloonkeeper always gives preference to the bartender who doesn't drink. If drinking whisky is bad for the man behind the bar, why isn't it equally bad for the man in front of the bar?

—Rev. Charles Stelzle.

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Seeing the Oak in the Acorn

A MEDICAL writer in a recent number of the *American Journal of Clinical Medicine* prefaces his discussion of the relation of alcoholism to the question of who may and who may not marry by the remark that "The fanatics consider a person an alcoholic who drinks a glass of beer or wine with meals. This is nonsense."

Who or where those fanatics are who apply the term alcoholic to a person who thus limits his drinking the writer does not state. We do not remember ever to have met them. It is common enough, however, to find those who recognize in the two or three glasses of alcoholic liquor a day the beginning of that use which years later develops in the alcoholic described by the doctor, and which he considers a decided bar to marriage. On this bar he lays strong emphasis:

"Where there is a distinct habit," he says, "so that the individual must have his alcohol daily, or if he goes on an occasional drunken spree, marriage must be advised against. And where the man (or woman) is a real drunkard, marriage not only should be advised against but most decidedly should be prohibited by law."

He proceeds to give some of the reasons:

1. The offspring is liable to be affected, which is sufficient in itself to condemn marriage with an alcoholic.

2. The earning power of an alcoholic is generally reduced and is likely to diminish further.

3. An alcoholic is irritable, quarrelsome and liable to do bodily injury to his wife. He is liable to develop also a jealousy that may reach the insane stage.

The writer seems to have overlooked the fact that this condition of alcoholism is usually found from fifteen to twenty years after the marriageable age.

We do not find such alcoholics as he describes among school boys; very rarely among college men, save where there is bad heredity, and it is doubtful if all the symptoms would then be fully developed. Statistics, experience and the testimony of specialists on the subject of alcoholism all agree that the preponderance of cases occurs in the fourth decade of life. It takes about twenty years for them to develop. Of what use at 40 years of age are the strictures against marriage which the doctor lays down?

Happily, physicians who are ready to fling the epithet "fanatic" at total abstainers are giving place to those who are themselves studying more closely the connection between those two or three glasses a day and the later stage to which they have led when there is "a distinct habit so that the individual" must have his alcohol daily or goes on a spree or becomes a real drunkard. Their observations are more and more leading to the conclusion that the sequel can only be surely prevented by avoiding the beginning.

*

Alcohol as a Comrade

IN HIS article on alcohol some years ago the late Prof. Hugo Munsterberg put in a plea for it as a means of relaxation from the tension of life. Nor is he alone in this. There are scientific men who have suggested this as one of the legitimate uses of alcohol.

Other writers while recognizing the relaxation effect couple it with warning of the dangers. Patrick in his recent book, "The Psychology of Relaxation," believes he finds the explanation of much addiction to drink in the seeking of a sense of well-being, false though it is, that alcohol temporarily brings. Booth Tarkington in the *American Magazine* for January, writing as a confessed "nipskillion," also maintains that men drink to get through it the comedy of life, a sense of physical contentment—which we now know is due to the narcotic action of alcohol. "With the relaxation, with the dispersal of caution, and of watchful dignity, incongruous things are said and grotesque things are done. Conse-

quences become remote; nothing seems to exist but the sunny present."

The story which Booth Tarkington relates of a life that gradually worked itself into slavery to drink through this would-be comedy route, but, fortunately, extricated itself more happily than some, indicates the fatuity of seeking for pleasure or relaxation or the comedy of life in drink. The conclusion was that "Alcohol is only the quick way to false comedy. The price is too high and the false comedy not worth having."

Patrick couples the statement of his theory with the warning that while alcohol may bring this sense of relaxation, "it is at the same time a poison bringing in its train a heavy residuum of damage not only to the individual but to society."

Whether this interpretation of the custom of using alcoholic drinks be true or not, the use seldom begins at that point. The man or woman who has never indulged in them has not experienced that sense either of relaxation or of special light-heartedness due to alcohol, and therefore, when they feel the need of either of these states of mind do not naturally turn to alcohol for it. But let the psychological effects of even moderate drinking become a matter of experience through social drinking customs and there is always the possibility that these effects will later be consciously sought or welcomed. Statistics even have shown that the great majority of confirmed drinkers begin with the social use of alcohol—because somebody asked them to drink. In other cases, curiosity, coupled with ready accessibility to liquor, may lead the young man to try it. The majority begin before they are 21 years of age, in the hey-day of youth when "the cares of this world" do not press so heavily as to require a sense of relaxation and when living is itself keen sport. Graft the drink habit upon a life at this period and the psychological effects of drink thus learned may be deliberately sought again in the stress of maturity. In general, we believe this is the true sequence: The effects of drink learned through its social use; the use of drink perpetuated by deliberate desire to repeat the experience thus acquired. Both foster familiarity with drinking customs and easy access to alcohol.

Booth Tarkington points "the way out"

for the man who learns that as Professor Kraepelin has said, "the jolly comrade (alcohol) for the price of one hour of exhilaration cheats us out of our self-respects, brings to ruin every being and every nation that yields to it."

For the vast multitude of young men and women it is more supremely important that they should not be taught "the way in."

The hostess who offers wine to her young guests opens that way. The older man who drinks points the way to the young man. With our present medical knowledge of the effects of even moderate doses of alcohol, young people should be taught the facts that will enable them to decide why they will not take the way in. "A wild animal that must be watched," says Dr. Fisk in the *Atlantic Monthly*, "is no very safe playfellow, and the record of alcohol in its influence on mankind certainly justifies the claim that it needs watching."

Along with this teaching must go that other training to youth to find relaxation, support, strength, courage in the higher forms of life rather than in a drug. Here are the opportunities for healthful recreation in sports, in books, in music and art, for the satisfactions from brotherly service, for the abiding and fundamental factor of religious faith.

It was a great thing that has been asked of alcohol—to supply all these varied needs of human life. It has proven false to humanity at every point in the reliance placed upon it.

*

Preventing Feeble-mindedness

(CONCLUDED FROM PAGE 94)

report, that the drunkard stands on a higher mental level than the criminal. In favor of this argument, note that only 44 of each 100 white inebriates were subnormal, as against 62 in 100 of white criminals. Opposed to it is the fact that the negroes tested showed a somewhat larger proportion of defectives among the inebriates, but with the balance slightly in favor of the argument that the drunkard stands on a higher mental level than the criminal. While the numbers of prisoners studied were too small to give thoroughly accurate conclusions, the results in the main, says the report, are fairly indicative of the facts.

Health Officials on Drink

ST. LOUIS

THE St. Louis *Board of Health Bulletin* has a timely warning that the use of alcohol "is a very common means of exposure of the body to attacks of pneumonia."

NEW YORK CITY

THE law forbids a man to carry a loaded revolver.

Alcohol-loaded brains are to be met on every side.

Which has caused the greatest amount of crime?

Does not the answer justify interference by the public authorities with alcoholic intemperance? reasons *School Health News* (Dec., 1916), published by the New York City Health Department for the information of school teachers.

CHICAGO

A WET Sunday means a bare cupboard and bare backs while the pockets of them who [sell] booze are fat with profits off the weakness of their fellows.—*Chicago Health Dept. Bulletin*, Dec. 9, 1916.

MASSACHUSETTS

ALL liquor contains poisons and other substances injurious to health, the most prevalent one being that highly toxic substance known as alcohol.—H. C. Lythgoe, Director of Division of Foods and Drugs, Mass. State Dept. of Health.

PENNSYLVANIA

ALCOHOL is perhaps the most important of all factors in bringing on pneumonia and hardening of the arteries and other diseases of later life. Lloyd George estimates that the abolition of vodka will increase the efficiency of the Russian people by from 30 to 50 per cent and experienced physicians agree that he is right.—Penn. State Board of Health in *The Metropolitan*.

NEW YORK CITY

WHATEVER the conclusions as to the percentage of alcoholism among the mentally abnormal, there can be no doubt that excessive indulgence causes insanity, and insanity is frequently associated with excessive indulgence. Of infinitely greater importance to the public is the question as to how the mentally normal can justify the persistent use of

alcoholic beverages, and how far we may consider normal those who are habitual users of alcohol.—*Weekly Bulletin*, Dec. 30, 1916.

THE KANSAS INSANITY SITUATION

INSANITY in Kansas makes a relatively favorable showing, according to the Sixth Biennial Report of the Board of Control of the State Charitable Institutions of Kansas for the two years ending June 30.

The actual increase in the institutional insane in Kansas between 1904 and 1910 was only 18 per cent as contrasted with the 25.1 per cent of the country as a whole. Its ratio of insane to population increased 8.5 per cent as against 11 per cent in the whole United States.

The Kansas report says:

"The burden of caring for the insane is becoming enormous throughout the United States, as well as in other countries. A recent report of the State Board of Illinois states that 'The state has poured out millions of dollars cheerfully; its uniform policy has been to constantly do more and more for its wards; yet its charity system is inadequate to the demands upon it.' In all the states we hear of the lack of room for the insane, and there was comment in the press that this same condition existed in Kansas. All that was necessary to relieve the situation in this state was to rearrange the wards, as suggested by Governor Capper's letter to the Board, of June 12, 1915."

There were but 17 alcoholic insane patients, all males, admitted to the Topeka Hospital in two years. "This," says the report, "is 2.1 per cent of all admissions, as compared with 3.2 per cent in the preceding biennial period."

"Fourteen of these were first admissions; three were readmissions. Four were foreign-born, while nine, or more than 50 per cent, were of foreign parentage. Fifty-three per cent of the patients, where a family history could be obtained, had parents or grandparents that drank to excess."

"When compared with the state hospital reports from other states, 2.1 per cent is a surprisingly small proportion
(CONCLUDED ON PAGE 111)

From Current Publications

ALCOHOL AS A SEDUCER OF YOUNG MEN

MORE than one-third (37.5 per cent) of the men having venereal diseases at the Norfolk (Va.) Training School admit having been under the influence of alcohol at the time of exposure, according to a report by Surgeon C. E. Riggs in the *United States Naval Medical Bulletin* (Jan., 1917).

The report says of the relation of alcohol to this class of diseases:

There is an intimate and not well-understood relation between alcohol and venereal disease. In the first place, alcohol and prostitution are close allies. Promoters of vice recognizing that alcohol stimulates trade and increases profits have combined the sale of liquor with professional prostitution to practically a universal extent in this country (Kneeland). Among those places catering directly to vice the saloons and their accessories come first, and of all commercial factors promoting vice the saloon stands alone for sinister importance.

Alcohol promotes prostitution, and prostitution is the main source of venereal disease. There are also other well-known connecting influences between alcohol and venereal diseases besides the commercial one. Individuals under the influence of alcohol are more liable to expose themselves to venereal infection, as alcohol attacks and paralyzes the higher levels of the nervous system, such as caution, judgment and self-restraint. Fear of disease, which is an important restraining factor, under the influence of alcohol is likely to be cast to the winds. It is also a therapeutic fact that alcohol should be prohibited from venereal patients, as this drug has a special influence in retarding the progress of the cure.

Metchnikoff has pointed out that alcohol has a harmful action upon the phagocytes, the agents of natural defense against infective microbes, and that persons who indulge too freely in alcohol show far less resistance to infectious diseases than abstemious individuals. Therefore it seems reasonable that the different venereal germs, in particular the attenuated ones, have a greater opportunity to gain a foothold at the time of exposure in those persons whose bodily resistance

has been reduced by alcohol than in those persons whose resistance has not been so handicapped. Consequently we would expect to find a greater percentage of infections following exposure under the influence of alcohol than we would find when no alcohol had been imbibed.

Authorities vary considerably in their estimates of the percentage of venereal disease which is contracted when under the influence of alcohol. Among the highest estimates is that of Dr. Douglas White, who states that about 80 per cent of the men who acquired these diseases have told their physicians that they have done so under the influence of some kind of alcohol. Forel gives 76 and Notthafft 30, as the percentage of venereal disease contracted when under the influence of alcohol. Of our 365 venereal patients, 137, or 37.5 per cent, admit having been under the influence of alcohol at the time of exposure, and 228, or 62.5 per cent, deny alcohol.

The actual percentage of those having taken alcohol is perhaps a little greater, as it was noted that several, having taken but a glass or two of beer, were unwilling to admit that they were in any way under alcoholic influence.

The report shows that statistics kept of the relative extent to which three forms of venereal disease were contracted indicated that the use of alcohol was followed by a larger proportion of cases of gonorrhoea and syphilis. "This unfavorable tendency shown by alcohol," says the report, "directly opposes that exerted by artificial prophylactic treatments."

In the case of two of the diseases, though the average number of days required to effect a cure was less in the case of patients who had been drinking when infected, Surgeon Riggs thinks these statistics are no indication in favor of alcohol. "The indictment against this drug has long since been so completely drawn that we are unwilling to make any interpretation from the above statistics favorable to it. Therefore, the averages are either merely accidental or there is another possible interpretation."

This possible explanation he finds in the fact that "the virus of these diseases is frequently attenuated so that exposure may not result in infection. Consequently

the lowering of bodily resistance by the use of alcohol would permit an increased number of infections by the attenuated number of germs which more readily respond to treatment and therefore the average number of days under treatment of all such cases is less."

Among Surgeon Riggs' conclusions as to the best methods of dealing with these diseases is the following:

The propagandas for the prevention of venereal disease and for alcoholic temperance may well go hand in hand, because (a) an attack upon one attacks the other and (b) for convenience, as the two evils principally exist among those of about the same social status.

*

INJURING THE QUALITY OF THE NEXT GENERATION

STILL further light on the problem of how hereditary harm is done by certain poisons is given by some new experiments by C. V. Weller (*Prac. Soc. Exper. Biol. and Med.*, 1916) which indicate that in lead-poisoning the injury is done to the *quality* of the life-cells themselves. They seem to be produced along normal lines and at a rate not unlike that in normal individuals. But changes in the quality seem to result in inferiority of offspring which shows itself in a reduction of nearly 20 per cent in the average birth weight, by an increased number of deaths in the first week of life, and by a general retarding of development, so that the offspring of lead-poisoned males often remain permanently underweight.

The investigation has value for the alcohol aspects of the question since it demonstrates again that it is possible for the life cell, despite its special protection, to be injured by poisons.

Dr. W. E. Castle, professor of Zoology at Harvard University, in his new work, *Genetics and Eugenics*, says:

"If in the lower organisms the potentialities of living substance can be altered, it seems reasonable to suppose that the same possibility may exist in the higher animals and plants, provided agencies capable of producing change are allowed to act on the germinal substance. It is the sheltered position of the germ cells which seems ordinarily to exempt them from direct modification. The experiments of Stockard show that in guinea-

pigs repeatedly intoxicated with alcohol, the germ cells are enfeebled so that the offspring of such parents, whether male or female, are more likely to be feeble and sickly and so to die."

*

SIMILAR EFFECTS FROM ALCOHOL, ETHER AND CHLOROFORM

IT IS well-known that an habitual drunkard accustomed to taking large doses of alcohol is usually resistant to general anaesthetics like ether and chloroform. Dr. H. B. Myers, the pharmacologist of the Medical School of the University of Oregon, has been experimenting with habit-forming drugs to ascertain which of them seem to be related in the matter of altered susceptibility. The drug action of ether on the central nervous system, he indicates, may be considered to be similar to that of alcohol, since both drugs act on the same nerve cells in the same direction and neither has a selective action not shared by the other. Alcohol and chloroform, says the *Journal of the American Medical Association* (Jan. 6, 1917) in referring to Myers' work, act on the same nerve cells in a similar way and probably bring about the same changes in the cell protoplasm.

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ALCOHOL'S SHELL FIRE

BY EUGENE LYMAN FISK, M. D.

THE postulate that the alcoholic is always a defective is no more sound than the postulate that the criminal is always a defective. No man is perfect, and while a mental or nervous defective of a pronounced type is usually, though by no means always, an easy victim for alcohol, what alcohol will do to individuals far above this line is often a matter of circumstance and environment. I have seen men with bad inheritance and many stigmata of nervous instability, develop, under proper encouragement and suggestion, a successful resistance to alcohol, and build up will-power and self-control; while on the other hand, I have seen men with good endowment—men who by no stretch of the imagination could be considered defective in a pathological sense—buffeted by fate, tempted by environment, and prodded by suggestion, gradually yield to the steady use of alcohol—sometimes to complete downfall, sometimes to woeful lack of achievement. Every reader of this magazine

can call to mind many fine men who have fallen by the wayside through alcohol—men whom it would be scientifically ridiculous to call defective.

After all, who are the "defective?" Where shall we draw the line? Who are the perfect men, these men who are above all manner of temptation, for whom alcohol is innocuous? While there are many men who have inherited or acquired a stability of mind or nervous system that doubly assures them against attack, I have yet to see the man for whom the more or less steady use of alcohol did not carry some menace. In fact, we are considering the mass of the people, and not exceptional types such as the common drunkard, the insane, or the superman. Among the mass of the people circumstances plus alcohol often constitute a dangerous combination; and alcohol often is responsible for the circumstances that make it dangerous. . . .

A group of insured lives must be considered in the moving equilibrium of actual workaday existence, and the many varied relations of that existence to the more or less steady use of alcohol in the quantities used by the mass of the people who drink, must be the touchstones applied to the life-insurance statistics presented in the previous paper. (*Atlantic Monthly*, Nov., 1916.)

We must bear in mind that even so mild an indulgence as one or two glasses of champagne or beer three times a month would, in the course of twenty years, make 720 exposures to alcoholic temptation, in addition to whatever disturbing effect on the moral, psychic, or physical condition such doses may have. Among two million individuals, even such slight indulgence would mean, in the course of one year, seventy-two million exposures to such varied adverse effects as there may be in small doses. Among those drinking every day two glasses of beer, the exposures to temptation and to further drinking among two million men would be in the course of one year seven hundred and thirty million, and in twenty-five years eighteen and a quarter billion.

Eighteen and a quarter billion exposures to alcohol might be compared to very distant artillery fire directed at an enemy. Many thousand shells are fired

to produce a few fatalities. Many fail to hit, but in the long run there is a definite fatality. The impact of eighteen and a quarter billion doses of alcohol on a group of two million men must certainly place the group at a disadvantage as compared to a group that is not exposed to such impact, provided, of course, that we find that the total effect of alcohol in the doses usually taken as a beverage is ever so slightly injurious in a direct way and carries any distinct danger of temptation to increased indulgence to the point where common observation shows it to be a deadly, destructive poison. . . .

We may sum up the evidence prior to Dodge and Benedict's researches by stating that alcohol has been found to be a depressant, a narcotic, often exerting, even in small daily doses, an unfavorable effect on the brain and nervous functions and on heart and circulation, and lowering the resistance of the body to infection.—*Atlantic Monthly*, January, 1917.

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ALCOHOLISM IN ITALY

THE fable that there is no drunkenness in wine-drinking Italy is punctured by Prof. Leonardo Bianchi, an Italian deputy, in *La Nuova Antologia* (Rome):

Not to leave the precincts of my own clinic, of 4,460 nervous patients who presented themselves in my dispensary from 1911-1915, 777 were alcoholics or sons of alcoholics. Of 511 epileptic patients between 1906 and 1911, 42 per cent were alcoholics (30 per cent parents, 12 per cent individually). This proportion is, however, below the truth, for in 36 per cent of the epileptic cases the real causes could not be reliably traced. Reticence on the part of the patients is a great enemy of medical statistics.

I can, further, affirm from my long experience that the greater part of my clients, affected by epilepsy and the various symptoms of degeneracy, hail from provinces where the people are known for their all too great love of the grape. Those who are interested in the purity and efficacy of our race, physically and mentally, would be well advised in hanging out the danger-signal, for else delinquency, idiotism, gout, indolence, will

soon have shaken to its very foundations our national existence.

Italian criminal statistics do not enter into the particular motives and causes of crime. All we can gleam from official documents is that in 1910, in 8,384 criminal cases, drunkenness was quoted as an attendant circumstance.

I know, from my experience, that deep melancholy, persecutorial mania, jealously leading to the assassination of the suspected individual, can, in many cases, be directly traced to overindulging in the gift of Bacchus. Most of our great criminals were hard drinkers before starting on their career of crime, or are sons of hard drinkers. I agree, in this regard, with Lombroso and Ferri. The headquarters of the *Mano Nera* and other associations of malefactors is the wineshop. We can easily become master of cholera and diphtheria, or typhoid fever and malaria. The grave problem before us is the prevention of the insidious alcoholization of the nation. The degrading poverty of the lower classes in certain sections of the country, our *lazzaroni*, the passion for gambling, the terrible infant mortality—for all this, and more yet, the special form of our alcoholism is mainly responsible.

The northern nations suffer more from acute intoxication, thanks to their stronger and consequently more dangerous beverage. But we have been drinking our *piccolo* with its ethyl-alcohol for centuries, while they started relatively late with their distilled alcohol. They can, therefore, as it has recently been proved in Scandinavia, Belgium, Russia, England and Germany, be easily de-alcoholized. Our problem assumes a doubly grave aspect in view of the hard struggle for existence which will be carried on in the New Europe of tomorrow.

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NEW MARKSMANSHIP EXPERIMENTS

(CONCLUDED FROM PAGE 88)

tion, insufficient food, irritable state of mind may greatly increase the impairing effect of the alcohol which preponderates even under the most favorable circumstances. Even if there is still a lack of experimental evidence, every day experience still seems to speak very clearly in this respect."

ONE MAN'S EXPERIENCE IN QUITTING DRINK

BY BOOTH TARKINGTON

While not every drinker might be able to stop in the way outlined here, the psychological viewpoint as a matter of practical experience is of interest and may be helpful in some cases when coupled as here with opportunity for physical recuperation.

A MAN "On the wagon" for a period does not become really lucid, for he's got the return to alcohol somewhere in the back of his head all the time. . . .

Then the miracle happened. I quit. Quit completely. Forever. All in a minute—just like that!

I didn't plan to do it. I didn't even attempt to do it. I just did it—or something did it for me. I woke up one morning, after an unusually fierce night, and when I crawled out of my bedroom for some brandy I found I couldn't lift a glass to my lips. That didn't alarm me, I'd been that shaky often, but I decided to go back to bed and sleep until my nerves were somewhat quieted. I did go back to bed, and I decided to stay there until I got "up to normal" without alcohol. I stayed there all that day and the next—when I began to care a little about real food—and the next, and the next. I stayed there ten days and when I got up I was feeble enough in body, but I'd given my mind or soul or "something" enough rest for it to get a quiet and true vision of what had been happening to me, of what I'd *slid* into, so to speak. And I was through. I had decided. . . . I made up my mind, not that I would quit but that I *had* quit. There's an enormous difference! If you make up your mind you *will* quit, you face a struggle, it's my belief that you *create* a struggle. But if you say, "It's over—I've *had* my last," and say it with conviction, *knowing* it, and are quiet and resting when you say it, I believe that's all there is to it, and there won't be any struggle. There I was with the actual habit of years fastened on me; you'd have expected me to be in a kind of agony, summoning my will power and fighting, "wrestling with temptation," battling against the craving, the terrible thirst. Nothing of the kind. I had said to myself that I was through, and I had actually meant it. That was part of the miracle, and the rest of it was that there was no struggle at all.

There was no craving, no temptation, no thirst. It's true I did have all the liquor thrown out of my apartment, when I first got up; but I needn't have done it. I'd as soon have forged a check as touched it. I didn't *want* to touch it. All I wanted was to get back to a real world and away from the sham one that alcohol builds.

So I went to work in the studio, and gradually the old delight in work came back to me, the old capacity to see and do; and it took the place of the false comedy and excitement. Things straightened out for me. And after a month I came back to the club. I sat with the crowd, picked up a cocktail and sniffed it. I knew myself so safe that I wanted to see if I'd feel any craving. "Craving?" No more than I'd have for so much kerosene!

That's the point of my case: there isn't any struggle if you quit as I did. They tell me there are dipsomaniacs, and there may be some abnormal people who can't turn the trick; but I almost doubt it. And I don't believe there's the slightest question of will power. Never for one second did I consciously exert my will, there wasn't anything real to exert it against. I didn't say to myself, "I will," or "I won't." I said, "I've had my last," and knew that it was true. It didn't take the will power, or the strength, of a caterpillar. It didn't take *any*. I just rested my head a little, got my head clear.

After all, a miracle is only Nature doing something we've learned to expect her not to do; and my miracle is one that will happen to any other man who'll *rest a while and consult himself*. My recommendation is two weeks in bed with nobody about except a servant to bring beef tea and toast.—*The American Magazine*, January, 1917.

*

OPTIMISM FOR RUSSIA'S FUTURE SOBRIETY

STILL another traveler in Russia, Robert Blake, writes discriminately in the *Atlantic Monthly* (Dec., 1916) of conditions in Russia under vodka prohibition. Like others, he records the increases in sobriety and efficiency, the vast improvement in country life. Although he found that substitutes are being made and used to some extent, on the whole the measure has been of great

benefit to Russia. Even the city dweller has been benefited. While the steady drinker has continued to obtain his liquor in one form or another, the occasional drinker has far less temptation now.

"The Duma has recently (July, 1916) passed a bill forbidding the sale of liquors containing more than 12 per cent of alcohol. This will give the steady drinker an opportunity to satisfy his thirst. Vodka, however, has disappeared, and the next generation stands a good chance of growing up without its corroding influence."

*

A PRELUDE TO A BONE-DRY LAW

HOW Oregon took pains to enforce that part of its prohibition law which was designed to control the importation of liquor for personal use before the state voted to become "bone-dry" is racily told in the *Railroad Man's Magazine* (Jan., 1917). The railroad station agent was held responsible for preventing illegal deliveries of liquor. Under the new measures adopted at the November election, all importation of liquor into Oregon for beverage purposes is forbidden.

*

INCREASE OF SAVINGS CONTINUES IN RUSSIA

THE deposits in Russian banks continue to show a remarkable increase as shown by the following table published by the *London Times*, October 28, 1916. The period represented is January to June in each year:

Millions of Roubles			
Deposits			
Years.	Money.	Securities.	Total.
1913.....	21.6	16.7	38.3
1914.....	18.8	20.2	39.0
1915.....	300.0	86.9	386.9
1916.....	596.2	390.8	987.0

"No wonder," says the *London Chronicle*, "the Russian Minister of Finance loves writing budgets. There can never be any question, he says, of going back. 'The shortage of liquor revenue,' we read in this budget (1916) is gradually being made good by increase in other revenue."

*

ALCOHOL is a danger to antenatal health and a menace to antenatal life at every one of the stages of that existence and through each of the progenitors.

World Notes

BRITISH REVOLTS AGAINST USE OF FOOD MATERIALS FOR BEER

THE daily press reports that Germany expects to help out its food situation by reducing one-half of the output of the breweries, thus releasing these food materials for consumption by the people.

In Great Britain there is a growing popular protest in some quarters against the inconsistency of diverting the products of an estimated 3,000,000 acres of land required in Great Britain and other countries to produce the barley and hops called for for the brewers' industry, while imperative orders are given that the purchase of sugar and confectionery must be reduced to the lowest possible point.

A Nottinghamshire farmer, for example, according to the *British Temperance Advocate*, complains that a crop of 2½ tons of fine plums was sold at a price that hardly paid for hauling it to the railroad because sugar is so dear and scarce. Yet, on one day shortly before he wrote, 15 tons of sugar went into one of the breweries. "Farmers are implored to grow all the food they can," he writes, "and we want barley meal badly to turn into foods, namely, pork and poultry; we want sugar to turn fruit into jam. But no; the brewer must have first run upon both."

All over the country notices like the following are posted:

Scarcity of Sugar

To get a supply of sugar customers must purchase—

3s 6d worth of groceries to get 1 lb.

7s 0d worth of groceries to get 2 lbs.

"While sugar purchasers are thus penalized, one brewer takes in 33,600 pounds of sugar in one day to be turned into intoxicating liquor."

Mr. Runciman, president of the Board of Trade, announced in Parliament November 15 that the sugar used in beer had been largely cut down and if the national interest required it, it would have to be cut down still further.

He also stated that there was a regrettable number of candy shops in the munitions area, but that "eating sweets is better than taking some form of liquor."

"In the army the consumption of liquor

has gone down and the consumption of sweets has gone up."

Sugar energy, as has been shown by experiments, makes better army stuff than alcohol energy.

Some twenty or more members of the British Parliament have signed and handed in a notice of motion—

"That in view of the grave statement of the president of the Board of Trade as to the shortage of corn, sugar and other food supplies, this House is of the opinion that the manufacture of intoxicating liquors should be abolished."

*

THE COST OF DRINK TO EFFICIENCY

ALDERMAN W. Plews Robotham, England, recently stated that during the ten months in which he served as chairman of the Derby Munitions Court they had 81 prosecutions of men for loss of time which delayed the manufacture of munitions. Of these, 35 (43 per cent) were directly attributable to drink.

*

HOLLAND SHUTS OFF GRAIN SUPPLY FOR SPIRITS

THE use of cereals in the manufacture of spirits has just been prohibited. Consequently distillation must cease in Holland as soon as the present grain stocks of the distilleries are used up.—*L'Abstinence*, Dec. 9, 1916.

*

NATIVES IN NEW ZEALAND SPOILED BY DRINK

THE conditions due to drink among the Maoris are indescribable according to a report presented recently to the New Zealand Anglican Synod by Rev. Digby Wilson. He thought that in no part of the world today except the West Coast of Africa was the condition of things so bad. Bishop Sedgwick reported that among the East Coast Maoris little children and women were drunken to the extent of being incapable of walking. The drunkenness, it was agreed by all the speakers, is nearly all due to the introduction of drink from outside districts.—*The Vanguard*, N. Z.

AMERICA'S RUM IN AFRICA

THE rum from America and other nations sent to the Gold Coast, Africa, is fast showing its ravages upon the natives, according to the statement of a Gold Coast missionary, Rev. S. J. Gibson, at the last annual meeting of the United Committee on Native Races and the Liquor Traffic. In the compounds there are scenes of frightful drunkenness. In one village of only 1,000 inhabitants \$350 a week was spent for rum, and in the colony as a whole one-third of the value of the magnificent cocoa crop was being spent on intoxicants.

*

FRANCE'S DOMESTIC ENEMY AT BAY

IN MANY large centers in France, the generals of the army have forbidden all display of alcoholic liquors in stalls, stores and shop windows, and in some cases have prohibited the sale of alcoholic liquors under heavy penalties. The orders apply to soldiers and civilians alike. In a case recently brought before the Supreme Court of Appeals, Guy Hayler states in the *International Good Templar*, the judges decided that the generals have full powers to issue these orders for the suppression of the sale and use of liquors.

The French liquor industries are putting up strenuous protests against the recent proposals of the new government to limit still further the general manufacture and sale of alcoholic drinks.

*

SWEDEN IMPOSING FURTHER RESTRICTIONS ON ALL DRINKS

THE Swedish government, to prevent the exhaustion of grain supplies, forbids up to November 1, 1917, the sale of spirits for home consumption in quantities exceeding two litres a month. Spirits for consumption on the premises can be sold only after a meal costing at least 12½ cents and no more than about one and a third ounces (5 ctl.) can be sold to one person.

No spirits, wine or beer, may be sold to persons receiving charitable aid or not properly providing for their families.

Wine and beer as well as spirits may not be sold after 2 o'clock in the afternoon preceding Sunday or a holiday.

Wine and beer to be taken from the place of sale cannot be sold on week days

before noon or after 7 o'clock in the evening.

These drinks cannot be sold for "on consumption" before noon, except to patrons buying a meal for at least 15 öre (about 4 cents), and not more than about half a pint of wine or beer can be sold unless the amount spent for the meal is at least 8 cents.

Warning is issued that if the sale of wine is abused or its alcoholic strength increased, the government foresees the possibility of complete prohibition or of severer restrictions. Violation of the present regulations will be punished by fines varying from a small minimum up to \$50.

*

DRINK BILL DECREASING IN SOUTH AUSTRALIA

THE drink bill of South Australia decreased about 20 per cent in the year ending June 30, 1916, from the expenditure in 1914, according to the estimates made on the basis of uniform prices by James Delehanty, who has made these estimates for several years. The decrease has been accompanied by a striking decrease of criminal offenses as shown by the criminal records. Crimes against the person diminished by one-half. There was a decrease of 11 per cent in drunkenness.

The war has undoubtedly somewhat checked expenditure for drink and the closing of the bars at 6 p. m. for the last three months of the year doubtless helped in producing the result.

*

KANSAS INSANITY SITUATION

(CONCLUDED FROM PAGE 104)

of alcoholic insanity. It should be borne in mind in this connection that Kansas, unlike many states, has no state inebriate hospital nor county nor city hospital where acute alcoholic mental disturbances such as delirium tremens and alcoholic hallucinosis may be treated."

At the Ossawatimie Hospital the 11 alcoholic cases constituted but 1.9 per cent of the total admissions. Nine of these came from border counties. "This low percentage of alcoholic insanity," says the superintendent, "strikingly proves the effectiveness and some of the benefits of state-wide prohibition."

PAMPHLETS

Those starred (*) are of special interest to students of the alcohol question.

Social Studies in Secondary Education.

A program for enlisting intelligent interest of public school pupils in civic and health questions. Arthur William Dunn, U. S. Bureau of Education, Bulletin No. 28, 1916. Government Printing Office, Washington, D. C. 10 cents.

***Course of Study and Tentative Syllabus on Hygiene for Elementary Schools.**

This course approved by the New York City Board of Superintendents and Board of Education is on trial this year and contains much that will be helpful to other schools who would systematize their hygienic and temperance teaching. Topics on alcohol and tobacco are provided for each grade.

***The Eye in Industrial Accidents.** Dr. Nelson M. Black, Milwaukee, Wis.

Bulletin of University of Wisconsin, General Series No. 603, Sept., 1916 Alcohol and Accidents, p. 6.

Nursing as a Vocation for Women. Katherine M. Olmstead, R. N.

Bulletin of University of Wisconsin, General Series No. 610, Nov., 1916.

***The Duty of Health Departments on the Alcohol Question.** Haven Emerson, M. D., Commissioner of Health, New York.

An address before the National Conference of Charities and Corrections.

American Public Health Problems. The Prudential Life Insurance Company, Newark, N. J.

Mortality from accidents in the United States, pp. 28, 29.

Industrial Accidents in the United States and Their Relative Frequency in Different Occupations. Frederick L. Hoffman, LL. D. Prudential Insurance Company, Newark, N. J.**The New Colony Plan for the Feeble-minded.** By Joseph T. Mastin, Richmond, Va.

An address before the National Conference of Charities and Corrections, June, 1916.

***Mental Defectives in Virginia.**

A special report of the State Board of Charities and Corrections on weak-mindedness in the state of Virginia, with a

plan for the training, segregation and prevention of the procreation of feeble-minded. Relation of alcohol, pp. 14, 72-85, also in many charts showing prevalence of alcoholism in feeble-minded families.

*

***Sixth Biennial Report of the Board of Control of the State Charitable Institution of Kansas for the two years ending June 30, 1916.** W. R. Smith, State Printer, Topeka, Kansas. The relation of alcohol to insanity appears on pages 5, 43, 94, 137, 153.

*

ARTICLES IN RECENT MAGAZINES DEALING WHOLLY OR PARTLY WITH ALCOHOL

The Atlantic Monthly, December, 1916. Alcohol in Russia. By Robert P. Blake.

The Atlantic Monthly, January, 1917. Alcohol and Physiology. By Eugene Lyman Fisk, M. D.

The Survey, November 4, 1916. The Rich Man in the Poor House. By Winthrop D. Lane. Contains a paragraph on drink as a cause of pauperism.

The Survey, December 30, 1916. National Prohibition a Leading Social Issue. By Robert A. Woods. Goals for 1917 in Prohibition. By Cora Frances Stoddard.

The American Magazine, January, 1917. Nipskillions. By Booth Tarkington. One man's experience in getting into and out of the drink habit.

Railroad Man's Magazine, January, 1917. You Do Solemnly Swear. By J. C. Wright. An account of Oregon's experience in enforcing the sections of its law relating to importations for personal use.

United States Naval Medical Bulletin, January, 1917. Prevention of Venereal Diseases. Pp. 8-11, 15. The effect of alcohol.

Social Hygiene, Jan., 1917, Vol. III, No. 1. Prostitution and alcohol, by Walter Clarke. A discussion of the psychological effect of alcohol upon the sex impulse. Has a good bibliography.

***Adult Illiteracy.** Winthrop Talbot, United States Bureau of Education. Bulletin, 1916, No. 35. Important to understanding the illiteracy situation.

The Latest Word on Russia

RUSSIAN PROHIBITION

By ERNEST GORDON

A new volume, containing the results of a searching investigation into the results of the Prohibition policy in Russia. A wonderfully interesting array of facts and figures bearing on all phases of the life of the Russian people.

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"The book is tremendously worth while and we are planning to give it special attention in the college work during the next few months."—Harry S. Warner, General Secretary Inter-collegiate Prohibition Association.

"One of the strongest arguments in favor of Prohibition that I have ever had the pleasure of reading, and should be of great value to the cause of temperance."—Governor Arthur Capper, of Kansas.

"Since the sale of alcoholic beverages remains a live question in America special interest attaches to Ernest Gordon's pamphlet on Russian Prohibition. . . . Its statements as to the decrease in Russian crime and vagrancy seem incontrovertible, supported as they are by statistics of evident credibility. The conclusion drawn from reading the brochure is that Russia has solved the drink problem. She has done more. She has discovered to the world how simple the problem really is—the best education for Prohibition was Prohibition."—Chicago Daily News.

"It ought to go by the ten thousand into every state voting on state-wide Prohibition this year."—Louis Albert Banks.

"I consider it a very good book."—Prof. Irving Fisher, of Yale University.

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MAY, 1917



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ALCOHOL AND WORK OF PRECISION

BY UNO TOTTERMAN

At the Physiological Laboratory of the University of Helsingfors, Finland

Needle threading was used by Totterman to test the effect of the daily use of small quantities of alcohol on mechanical work requiring precision. The amount of alcohol taken (25 ccm.) was small, being equivalent to that in a little more than a pint of 4 per cent beer (17.5 oz.). Although the alcohol was taken eleven hours before beginning the test work, within four days the total number of needles that could be threaded daily fell off, while on the non-alcohol days the number of needles threaded increased from day to day. The diagram shows the results graphically. In the second group of alcohol days the decrease in the work done appeared on the second day and was more through the whole group than in the first alcohol group. The experimenter suggests that this may indicate that some effects of the alcohol taken during the first group of alcohol days may have lasted over the intervening non-alcohol days, making the worker more susceptible to its effects when the alcohol was resumed. A greater sense of fatigue was felt on the alcohol days, and, as is usual in experiments of this kind, the experimenter found that on the alcohol days he was unable to judge correctly as to his efficiency.

DURING the last decade it has been clearly shown by many experiments that alcohol, if not taken in too small quantities, largely diminishes our vitality and power to do mental as well as physical work. It has also been shown that with the use of alcohol continued for several days, even in cases where a very small percentage of alcohol has been used, the effect has been very obstructive to mental work, and this result has been marked, not only immediately after the taking of the alcohol, but also after a time, when the direct results are supposed to have disappeared.

The first person to point out this fact was A. Smith.* The experiments were carried on with two persons, one of whom for several years had been a total abstainer, while the other at the time of the experiment was in the habit of using alcoholic liquor. These experiments consisted of addition of figures in single columns, readings to be memorized, and associations of ideas. The experiments were tried out in several series, in some of which alcohol

This report is translated from Finska Läkaresällskapets Handlingar. Oct., 1916. Acknowledgments in connection with the translation are due to Mr. H. P. Paulson.

*Smith. Ber. über d. V Intern. Kong. d. Alkoholismus. Basel, 1895.

was not used; in others from 40 to 80 gr. of alcohol were taken daily. The alcohol was taken in the evening during the alcohol period, while the test was performed the following morning.

The results of these experiments show clearly that the use of alcoholic liquor for several days at a time lowers the ability to do the mental experiments referred to even as early as the third day after beginning to take the alcohol.

The results of these experiments were fully verified later by experiments of Kurz and Kraepelin.

If, under such circumstances, very small doses of alcohol, taken for a few days, will reduce to a great extent the individual power for mental work, it seemed to me but reasonable to believe that the power to do mechanical work should be affected in the same manner. Still, as far as I know, no direct experiments have ever been published to show this to be a fact, while anything along that line would be of both theoretical and practical value and interest.

The following experiments suggested by Dr. Carl Tigerstedt during the physiological exercises in the fall of 1915 were done to prove to what extent regular use of alcohol in small quantities would affect the individual power for mechanical work involving precision.

The Kind of Work Tested

The work selected for an experiment of this kind was the threading of sewing needles. This work may seem simple enough, but it is particularly hard if the thread is coarse in comparison with the diameter of the eye of the needle. It takes a high grade of co-ordination upon which alcohol may seem likely to have a harmful effect.

The author of this article was himself the experimenter. The argument against the results of the experiment may be that they were more or less dependent upon the previous opinion of the author in regard to the ill effect of alcohol. In regard to this argument I will say that although a total abstainer for the six months before beginning this experiment, I have, however, no personal aversion to alcohol and I do not particularly see any objection to a temperate use of it. Add to this the fact that at the time when my experiments were performed I had very little knowledge of results of earlier experiments in regard to the effects of alcohol on the physical functions of the body.

My experiments covered a period of 43 days, from November 15 to December 27, 1915. The first 14 days no alcohol was taken; then came 10 alcohol days; then nine days without alcohol; finally another group of 10 days when alcohol was used.

During this experiment very strict conditions otherwise were observed. No tobacco was used.

During the alcohol days 100 ccm. of 25 per cent alcohol (about five-sixths of an ounce) were taken at 11 o'clock p. m.

The tests took place on the following day at 10 o'clock a. m. Hence on

the alcohol days, they were performed 11 hours after the alcohol was taken and at a time when its immediate effects had disappeared.

Preparations for the Tests

The plan of the experiment was that for a period of 20 minutes I should thread as many needles as possible.

In preparation, 200 needles were stuck in a cushion from which they could easily be taken one at a time. The thread was cut in 20 cm. lengths and the pieces laid on a board so that the end of the thread came a few centimeters over the edge of the board. To avoid taking several threads from the board at the same time, thus causing them to tangle, a ruler was laid across the threads. Before me was a paper on which I threw the needles after they were threaded. Every five minutes by a simple movement of the hand, I laid a new piece of paper over the threaded needles. By so doing I was able later when counting the results to get not only the total results, but also the separate results for the four periods of five minutes each.

A number 6 needle, length 40 mm., and diameter at the thick end two-thirds mm., was used for this experiment. The length of the eye of the needle was nine-tenths mm., the breadth one-third mm. The thread was white sewing thread number 36, one-third mm. thick. Before each test the ends of the threads were freshly cut and during the time of the experiments there were new threads used several times.

It might be thought that the use of a needle with a smaller eye would, perhaps, have made it possible to more easily detect the result of the alcohol (the smaller the eye, the more precise the hand that threaded it had to be), but the advantage of this had its disadvantage, viz., that the least roughness at the end of the thread would greatly hinder the operation.

Results in the First Non-Alcohol Period

The results of my experiments may be seen in the diagram. The register of my efforts may be followed in Tables I-IV.

An examination of Table I shows that the working ability increased by training day by day. On the first day, only 103 needles were threaded, but on the second and third days there were 150 and 165 needles, re-



The effect of alcohol on the ability to do work of precision. Days when no alcohol was taken, white; alcohol days, black. The vertical line of numbers signifies the number of needles. The work of each five-minute period during the 20 minutes can be seen accordingly.

spectively. The following days showed a further increase until a maximum of 188 needles was threaded on the 12th day. The 13th and 14th days were less good, 185 and 184 respectively.

Dexterity vs. Fatigue

One might suppose that in such exacting experiments the results would be largest in the first five-minute period, and slowly diminish through fatigue during the other three periods. This, however, was not the case; it is clearly shown that the maximum was attained in the second period. The difference between the results in the first and second five-minute periods is, however, slight, on an average, 1.8 needles in 14 experiments.

The reason for the increase during the second period may be found in the fact that during the first five minutes' work the increased dexterity surpassed the inevitable fatigue. A different condition existed during the last two periods, the fatigue increased more than the ability, and the result was a decrease in the working power. While the results during the last two periods average 42.1 and 41.0 respectively, only during one test (fourth day)

TABLE I. WORK WITHOUT ALCOHOL

NUMBER OF NEEDLES THREADED					
DAY	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	TOTAL
1.....	25	27	26	25	103
2.....	35	39	38	38	150
3.....	40	43	42	40	165
4.....	39	41	42	43	165
5.....	41	44	43	38	166
6.....	41	42	42	41	166
7.....	41	42	42	42	167
8.....	42	43	42	40	167
9.....	43	45	44	43	175
10.....	44	46	45	44	179
11.....	45	46	45	45	181
12.....	48	49	47	44	188
13.....	46	47	46	46	185
14.....	46	47	46	45	184
Average.....	41.1	42.9	42.1	41.0	167.2

where the result increased in the two last periods, and on another (the seventh day) did I maintain the work at the same point during the third and fourth periods as during the second period.

Decrease Appears on the Alcohol Days

As has been stated before, during the alcohol days only 25 gr. of alcohol per day were taken, and the experiment showed, as might have been expected, that if a result was to appear it would not come until the consumption of alcohol had gone on for some time.

During the first 10 alcohol days (Table II) the total result increased in

the first three days (15th, 16th and 17th days) from 184 to 189 needles. During the next two days it decreased to 186 and 184 respectively, but a like decrease occurred during the 13th and 14th days when no alcohol was taken (Table I). The cause cannot, therefore, with any degree of certainty be referred to the alcohol.

A clear decrease due to the use of alcohol can be seen beginning with the sixth alcohol day (20th day) when the amount of the work had decreased to 177 needles, and from that time on, during the alcohol days, a regular decrease took place down to the minimum of 164 needles on the 24th day.

Errors in Self-Judgment Under Alcohol

It may be noted as a peculiarity that the work during the first four alcohol days seemed to go more slowly, but the counting showed it to be as good as that of the last days when no alcohol was taken. During the following days the work went on with less effort and I expected accordingly better results but on counting up it proved to be the other way. During the last part of the alcohol days the hand would tremble a little, and it was

TABLE II. WORK WITH ALCOHOL

NUMBER OF NEEDLES THREADED					
DAY	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	TOTAL
15.....	45	47	46	46	184
16.....	46	47	46	46	185
17.....	47	49	47	46	189
18.....	45	47	48	46	186
19.....	46	47	46	45	184
20.....	44	47	45	41	177
21.....	44	46	40	39	169
22.....	43	45	44	39	171
23.....	43	43	40	39	165
24.....	43	43	40	38	164
Average.....	44.6	46.1	44.2	42.5	177.4
Average days 15-19.....	45.8	47.4	46.6	45.8	185.6
Average days 20-24.....	43.4	44.8	41.8	39.2	169.2

also noticeable that while at work a certain fatigue in the eyes developed.

Fatigue and Inefficiency Greater on Alcohol Days

During the first five alcohol days no difference could be noticed from the days when no alcohol was taken. Amounts of work done were largest in the second period (an average for these days of 47.4 needles) and decreased in the fourth period to the same as in the first period (45.8). During the two following days (20-22) the increase in the second period was even larger than it was on the five earlier alcohol days, but in the two last periods a large decrease appeared so that the results in the fourth period average four needles less than in the first period. The last two alcohol days showed no increase during the second period, and in the fourth the results are 4—5

needles less, respectively, than in the first period. These results go to show that the tired feeling and a decreased ability to work are greater during the alcohol days than when no alcohol was taken.

Working Ability Returns When Alcohol Is Stopped

During the 25th-33rd days, again, no alcohol was taken. The working ability seemed to return very quickly (Table III). The results, which during the last two alcohol days were respectively 165—164, increased the first non-alcohol day to 167 and later, slowly but regularly increased to 183 during the 30th day, to 184 the 31st and 32nd days, and to 191 the 33rd day.

During the first day of this group when no alcohol was taken (25th day), the work of the first period coincided exactly with the maximum of the last alcohol day. But the decrease during the other periods was very small, only two needles. Not until the following day are results of other periods larger than the first, while on the next day (27th day) the fourth period's results are two needles less than the first period

The other six days when no alcohol was taken show somewhat the same results as those during the first group of days without alcohol (Table I). There was an increase in the working ability from an average of 45.2 in the first period to an average of 47.3 in the second period, which later decreased to 44.8 in the fourth period. This is only 0.4 decrease from the first period.

As I have said before, the working ability during the last day, when no alcohol was taken (33rd day) reached 191 needles, but this does not seem to me to give an exact expression of my normal ability; it seems rather to be too high when you compare the result of the three preceding days, which were only 183 and 184 respectively.

TABLE III. WORK WITHOUT ALCOHOL

NUMBER OF NEEDLES THREADED					
DAY	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	TOTAL
25.....	43	42	41	41	167
26.....	43	44	43	41	171
27.....	44	46	43	42	175
28.....	43	47	46	44	180
29.....	44	46	45	43	178
30.....	45	47	46	45	183
31.....	46	47	46	45	184
32.....	45	48	46	45	184
33.....	48	49	47	47	191
Average.....	44.6	46.2	44.8	43.7	179.2
Average days 25-27.....	43.3	44.0	42.3	41.3	171.9
Average days 28-33.....	45.2	47.3	46.0	44.8	183.3

Though during the first day of the final alcohol group (34th day, Table IV) the total reached only 185 needles, I cannot for that reason see that there is any decrease in working intensity on account of alcohol. A decrease,

however, can plainly be seen in the following day (35th) during which the result was 182 needles. This diminution increases with the use of alcohol so that the two last days of the experiment (42 and 43) only 157 needles were threaded during the 20 minutes' time.

Alcohol Effects Appeared More Quickly in Second Group of Alcohol Days

Between the two alcohol groups of days there is a very marked difference in that the result during the last period decreased even on the second day, while during the first period it showed an increase during the first alcohol days which did not change to a sharp decrease until the sixth day (day 20).

Hence, it looks as if the effect of the alcohol might not have disappeared altogether during the non-alcohol days, but that to a certain extent it remained in the body which in the second group of alcohol days was more susceptible to it than in the first.

The changes resulting from the alcohol in the last alcohol days were the same as in the first group of alcohol days. In the first four alcohol days (34 to 37) the working ability was greatest in the second period; during the other days either the same results were noticed for both the first periods, or a decrease was noted as early as the second period. The result during the fourth period averaged three needles less than in the first. The trembling of the hands which almost entirely disappeared during the days when no alcohol was used appeared again with a greater intensity during the last alcohol days. Also a higher degree of fatigue manifested itself in the eyes.

It has been satisfactorily shown by these experiments that a daily use of 25 ccm. of alcohol (equivalent to that in a little more than a pint of 4

TABLE IV. WORK WITH ALCOHOL

NUMBER OF NEEDLES THREADED					
DAY	PERIOD I	PERIOD II	PERIOD III	PERIOD IV	TOTAL
34.....	47	48	46	44	185
35.....	46	48	45	43	182
36.....	44	47	44	42	177
37.....	43	45	42	43	173
38.....	43	43	42	41	169
39.....	43	42	40	39	164
40.....	42	40	40	39	161
41.....	42	42	40	39	163
42.....	41	39	40	37	157
43.....	42	40	39	36	157
Average.....	43.3	43.4	41.8	40.3	168.8

per cent beer) will decrease within a very few days the individual power for mechanical work requiring precision of a nature similar to that of these experiments. The diminution of power seems to be a decrease of the working ability in itself (the results of the work in all the experiment periods

decreased) for the reason that the organism tires more quickly than on the non-alcohol days. This is shown by the fact that owing to the effect of the alcohol during the last alcohol group of days the results were very much poorer than in the first group.

This fact should be carefully observed in this experiment, that the amount of only 25 ccm. of alcohol per day is capable of reducing the working ability to such an extent in my experiments, though a great many scientists consider that 25 ccm. of alcohol may be taken daily with perfect safety and without impairing in the least the bodily functions.

It is to be noted that the alcohol (25 per cent vol.) was taken, in my experiment, in a concentrated form and was not taken in connection with food. Under such conditions it may even have had a relatively stronger effect than if it had been more diluted.

It is also well known that the effect of alcohol is different on different individuals, and there is the possibility that I may have been relatively susceptible to its ill effect.

ANTE-NATAL EFFECTS OF ALCOHOL—A REVIEW

BY E. L. TRANSEAU

THE city of Edinburgh has a maternity hospital in charge of a physician who has made antenatal hygiene and pathology his specialty, is the author of a medical textbook and numerous smaller works on the subject and has been lecturer on the same branch of knowledge to the University of Edinburgh. The last number of the *British Journal of Inebriety* contains an important article by this author, Dr. J. W. Ballantyne, to which he appends a list of 183 separate works on the "antenatal effects of alcohol," a list which he says is not exhaustive but will serve as a basis for a more elaborate list.

The Three Periods of Antenatal Life

With a knowledge of the subject which one would expect from such a command of the sources of information, plus his own experience, Dr. Ballantyne proceeds to classify under three heads the experimental results "which have been obtained regarding the influence of alcohol upon the unborn." These three heads cover the three periods, working backward from birth, when the individual that is to be is known to the scientist as a **foetus**, an **embryo** and a **germ cell**.

The foetal period in the life of the individual occupies about seven months, the embryonic about six or seven weeks; but the germinal, to quote Dr. Ballantyne's own words, stretches "away back into the lives of the parents," when "not yet conjoined to give each other the stimulus that comes from being of different sexes, they lie patiently in the paternal or maternal sex glands awaiting great developments and subject to the influences which the surrounding tissues may bring to bear upon them."

"Little is surely known of what happens to these waiting germ cells,"

he continues, "before the sperm meets the ovum and the first act of the great drama of the individual life begins in the transformation of the unimpregnated ovum into the zygote by its fusion with the spermatozoan, but they are not uninfluenced by what is taking place in the bodies of the parents, and especially in the paternal or maternal blood which surges past and around them, and they have at least one great physiological event to chronicle—namely maturation, with its mysteriously significant phenomena of chromatin readjustment and expulsion of polar globules."

Two of the antenatal periods, the foetal and embryonic, have to do only with the mother, but the germinal includes both father and mother. In this the germ cells have almost the same relationship to the blood and nervous system that any of the other cells of the body have, and it may be supposed that they enjoy no special protection at all, although possibly the wall of the Graafian follicle may in the case of the ovary of the female serve to some extent as a defense. At any rate, the germinal period in by far the larger part of its extent is under the influence for good or ill of both parents.

The Effect of Alcohol in the Foetal Period

Dr. Ballantyne then takes up the evidence as to the effect which alcohol in the blood of the parent has during each of these periods. Evidence derived both from animal experimentation and observation in human beings as to the passage of alcohol from the blood of the mother to the foetus, Dr. Ballantyne regards as now conclusive. But the kind and amount of harm done he thinks depends upon the time when the alcoholic influence begins. Malformations are not so likely to occur if the alcohol first enters after about the mid-term of gestation. "I am of the opinion," he says of this period, "that the evil effects to be anticipated and looked for are rather of the nature of premature labors, miscarriages, dead-births, hemorrhages in labor, and of early mortality among the infants who are born alive."

This opinion seems to be supported by the fact that when the supply of drink has been compulsorily stopped in the second half of pregnancy, living and even surviving infants were born to women who had had dead-births and the like previously.

Alcohol and the Embryonic Period

The bulk of the evidence as to the effects of alcohol during the embryonic period has been derived mostly from the incubation of eggs, chiefly hen's eggs. Numerous experimenters have worked in this field, but Charles Féré, by injecting various poisons directly into the albumen of the egg, got results that were practical and obvious for mammalian as well as for birds. He discovered that various toxic substances, including the alcohols, had the power of retarding growth and of stopping or of misdirecting development so that monstrosities of many kinds were produced. His results determined that the same substances that cause disease in adult and child life bring about deformities when acting upon the embryonic phases of life. But the difficulty of verifying this effect in human life has to be acknowledged. In order to yield a test case it would be necessary for the alcoholization to oc-

cur during, and only during, the five or six weeks of the embryonic period.

The most important experimental work of recent years regarding the effects of alcohol in prenatal life, Dr. Ballantyne states, has been done in the germinal period, and to this evidence clinical research has made a large contribution. "And there is good reason to believe," he concludes, "on the evidence which has been thus collected, that alcohol produces its most serious and lasting evil effects upon the individual and the race in the time before the appearance of the embryo in the uterus—namely, in the germinal period."

This period is itself divisible into two very unequal sections, the two weeks following the union of the paternal and maternal germ cells, before the beginning of the embryonic period, and the long preceding period when the two cells before union are separately guarded by the father and the mother.

The ancients possessed sufficient knowledge from experience of the detrimental effects of alcohol upon the short, pre-embryonic section of the germinal period to make them very specific in denouncing alcoholic conceptions.

"Young man," said Diogenes to a stupid child, "thy father was very drunk when thy mother conceived thee." The observations of Bezzola and Schweighofer as to the greater frequency of idiocy and mortality among children conceived during carnival seasons are cited in confirmation of the old Greek lessons from experience.

But of recent evidence, clinical, pathological and experimental, bearing upon the influence of alcohol upon the reproductive cells in adult bodies, Dr. Ballantyne holds there is no lack. The clinical records of Lancereaux and Simmonds, the exact histological pictures of Bertholet and Weichselbaum, are lined up with the experimental evidence obtained by Combemal, Hodge and others from dogs, and by Laitinen and Stockard from guinea-pigs.

Of the work of the last named experimenter he says:

"Recently the long continued experiments of Stockard and of Stockard and Papinicolaou on guinea-pigs have placed the degenerative effects of alcohol on the germ cells practically beyond the reach of criticism."

The points in Dr. Stockard's work which Dr. Ballantyne notes particularly are the following:

The animals who inhaled the alcohol were little changed or injured so far as their behavior and their structure were concerned, but evil effects were emphatically shown in the offspring to which they gave rise, and these effects were produced whether the alcoholized animals were mated together or with normal individuals.

The bad effects were manifest in the first generation of offspring, but they were still more marked and serious in later generations; then the young ones were born weakly, suffered from a neurosis resembling paralysis agitans, and in some instances were monsters with eye deformity.

The irresistible conclusion seemed to be that the alcohol had by its chemical action modified the chromatin of the germ cells, and that this tainted

chromatin had been living for more than five years in four different generations of animals, as a result of the treatment of the one original parent generation. It was clear that the effect of the alcohol was seen in both the soma and in the germ cells of the offspring.

The great and outstanding fact appears to be that alcohol produces an injurious effect upon the so-called carriers of heredity in the germ cells of one generation, which can be seen not in less but in more marked degree in the great-grandchildren of the original pair of animals.

The Value of the Stockard Experiments

Dr. Ballantyne's concluding paragraph on the effects of alcohol upon the germinal period of antenatal life deserves to be quoted entire:

"In the presence of such results many otherwise inexplicable, or at any rate puzzling phenomena stand in clear light or in less thick darkness. There is, for instance, von Bunge's observation of the incapability of the daughters of alcoholic fathers to supply milk for their babies. There are the floating and more or less unrelated reports of the occurrence of various stigmata of degeneracy in the descendants of drunkards, extending from actual monstrosities, such as anencephaly (absence of brain) through various minor malformations, nervous maladies, such as epilepsy and dead births, to simple congenital debility and stunted growth. Individual observations in teratology (knowledge of monsters or malformations), in antenatal pathology, in neurology, in sociology even, and in criminology, stand out sharply in what is a sort of flashlight brilliancy. A single case may be cited as an illustration:

"Some twenty years ago the writer delivered an anencephalic foetus, the product of a man and a woman, neither of whom seemed to have any morbid traits or alcoholic leanings. Quite recently he discovered that the father's father was a confirmed drunkard. Without Stockard's experiments and those of others, the discovery means little, but with them in full view it assumes a new significance.

"At the same time one ought not to focus one's gaze upon grossly teratological results (births of monsters) but upon the lesser abnormalities of function and structure in the descendants of alcoholic parents, if one would reach rapid conclusions regarding what Forel has called by the somewhat uncouth name of **blastophthoria**, or deterioration of the germ, and what others have termed, somewhat unfortunately, 'false heredity.'"

Antenatal and Postnatal Life Subject to Same Injurious Influences

One point made by Dr. Ballantyne which helps to eliminate the mystery that has attached to the heredity of alcoholism is his clearly stated belief that the effects of alcohol upon the unborn are simply in keeping with the effects with which we are familiar in the child and the adult. The causes of morbid processes whether in antenatal or postnatal life he regards as in all probability the same—injuries, poisons, microbes and parasites. The results differ under different environmental conditions. In antenatal life they may be seen in unique diseases peculiar to the foetus, or in monstrosi-

ties arising in the embryonic period of formation. Farther back they produce an abnormal state of the germ cell. He is not ready yet to put the injuries produced by alcohol in a class by themselves and class them as "germinal pathology due to alcohol," a position that really strengthens rather than weakens the case, for it points to the workings of a law.

Hence we may agree with his passing remark that "The crusade against alcoholic indulgence will in no wise be discouraged or weakened if it be said by the profession that alcohol produces effects upon the unborn infant, the embryo, and the germ, similar to and not less unpleasant than those arising from lead, from the typhoid germ, or from tubercle bacillus, though in an immediate sense less deadly, perhaps, than from syphilis, which is blastophthoria in *excelsis*, or more appropriately, in *profundis*."

Antenatal Child Welfare

The final paragraph of the paper is headed, "Antenatal Child Welfare," and in it we read:

"Alcohol is a danger to antenatal health and a menace to antenatal life at every one of the stages of that existence and through each of the progenitors. It is possible, and indeed probable, that the pregnant woman who takes to drink in the last weeks or months of her gestation is doing less damage to the unborn life than the man who soaks before marriage and continues to imbibe after it.

"Alcohol is a danger from one conception, from one procreation, to another; there is no time under the sun when it is suitable or safe to court intoxication.

"All intending parents should remember that they carry in their bodies the most precious of all earthly things, germ cells; and they should protect these from all evil influences—traumatic, toxic, toxins, microbic—as they would their own lives, for by doing so they can give a great gift, none greater to future generations."

* * *

QUIET WORK

One lesson, Nature, let me learn of thee,
 One lesson which in every wind is blown,
 One lesson of two duties kept at one
 Though the loud world proclaim their enmity.
 Of toil unsevr'd from tranquillity!
 Of labor, that in lasting print outgrows
 Far noisier schemes, accomplish'd in repose,
 Too great for haste, too high for rivalry!
 Yes while on earth a thousand discords ring
 Man's fitful uproar mingling with his toil,
 Still do thy sleepless ministers move on
 Their glorious tasks in silence perfecting;
 Still working, blaming still our vain turmoil,
 Laborers that shall not fail when man is gone.

—MATTHEW ARNOLD.

THE NEW JUKE STORY

An Investigation Continuing After Forty Years the Account of the Famous Juke Family

FORTY-TWO years ago, in 1875, Dr. Richard Dugdale published his now famous study of the "Jukes," a family group of New York state conspicuous for its various forms of degeneracy. Prostitution, crime, intemperance, inefficiency were rife among them. Dugdale gave an account of 709 individuals of whom 540 were directly descended from the original five sisters. The remaining 169 were those who had married into or consorted with the Juke stock.

In 1911, the records of the original data gathered by Dr. Dugdale were found among some papers in the cellar of the New York Prison Association building. This made it possible to renew the studies under the direction of Arthur H. Estabrook of the Eugenics Record office.*

Max Juke—name fictitious—was born sometime between 1820 and 1840. He was a descendant of the early Dutch settlers of the country. He is described as "a hunter and fisher, a hard drinker, jolly and companionable, and averse to heavy toil."

The Juke Sisters

Two of his sons married two out of six sisters who were born between 1740 and 1770 of parentage not definitely settled.

One sister's line has never been traced as she moved out of the country. The other five were married, but three of them had illegitimate children before marriage. Ada is better known as "Margaret, the mother of criminals." Before her marriage she had an illegitimate son, who, Dugdale says, was the progenitor of the distinctively criminal descendants, and Estabrook says that his descendants were generally intemperate.

Bell Juke, another sister, had four illegitimate children, three of whom were black. One of these married a mulatto, and all their children married negroes.

Clara, the third Juke sister, was temperate and reputed chaste, but married a licentious man. Delia and Effie married two of the sons of old Max Juke. As time went on, these family lines often intermingled by marriage or illegitimate relations.

The Juke Community

For a century the Jukes lived in a wild, inaccessible and unfertile region of New York state in small stone or log houses of one or two rooms each, "the men, women and children commingling freely."

*The Jukes in 1916. Publication No. 240, Carnegie Institution of Washington. Paper No. 25 of the Station for Experimental Evolution at Cold Spring Harbor, New York.

At the time Dugdale made his report, the community was practically intact. Only a few migrations had taken place. But in 1880 the cement industry, which provided employment for many Jukes, was discontinued. The Jukes scattered, and not one now remains in the isolated region which was their old home.

During the century, the record shows, the Jukes developed into a community many of whose men were criminal, the women licentious and most of the people but partly industrious. The girls and young women were physically attractive, but loose in morals. As a result men even from "good" families in a near-by city were attracted thither and many an illegitimate child bore a name of the father which sometimes should have been an honored one.

The diseases of vice thus spread from this center to the virtuous wives and respectable homes of the neighboring community. The real name of the Jukes became a synonym for disreputable being. "You act like a Juke" was a current form of reproach. Some employers in near-by cities and towns had a standing order that no person of the Juke name should be employed.

The Jukes of Today

The present story is that of 2,820 individuals as compared with Dugdale's 740. There are 2,094 of the Juke stock; 726 of those allied by marriage or consort with the Jukes. Of the Jukes proper, 378 died under five years of age, and 1,258 are now scattered in twenty states and in Canada.

As to present conditions, they are roughly divided into three classes. Of the 748 Jukes over 15 years of age, 76 are classed as good citizens, prosperous and rearing good families. There are 255 doing fairly well, "steady, hard-working persons, who toil from day to day at semi or unskilled labor and endeavoring at least to rear their children to the parental social level." Of the rest, 94 are unclassified, and 323, almost half (43 per cent), are still typical "Jukes."

Illegitimacy and Prostitution Still Prevalent

The percentage of illegitimate births among them remains about the same today, including the Dugdale figures (16.28), that it was up to Dugdale's time (17.26).

Harlotry has decreased but little. Dugdale reported that 52.4 per cent of the women of marriageable age had been harlots. Estabrook, 41 years later, reported 51.2 per cent.

Insanity, Pauperism and Crime

Insanity seems not to have been a Juke characteristic. Only four cases are reported.

Dugdale estimated that Juke pauperism had cost up to 1875, \$20,680. At the present rates of cost for outlay, the poor relief to the Jukes since 1875 is estimated by Estabrook at \$83,710—a total of \$104,390.

Estabrook found relatively fewer criminals than had Dugdale. The marked community of criminality had been broken up. The scattering of

the family in 1880 put an end to congregate stealing. The crime of today is, therefore, more often the product of one brain and less daring. Nevertheless, the crime record is sufficiently conspicuous, 118 Jukes and 53 persons of allied families having been in penal institutions. All of these, Estabrook notes, were defectives and in but one case did penal servitude appear to have any reformatory influence. The one instance was a young man who committed an assault under the influence of liquor and who, after serving his term, lived a sober, straight life.

The financial cost of this family to the public Estabrook estimates at \$2,093,685. And to this he has added an estimated expenditure by the 282 alcoholic Jukes of \$423,000 for liquor.

Alcoholism Improved by Lessened Accessibility to Drink

An interesting illustration of the effect of lessening temptation to drink upon drinking habits appears in the report.

The family stock is poor. Such we are often told is the cause or basis of intemperance. Alex, the illegitimate son of Ada, who was one of the five original sisters, was himself "sober" (presumably according to the meaning of the word in his day), and so was his wife, Beatrice. His descendants were, in general, intemperate. One of his sons was not only alcoholic, but kept a tavern and brothel. *The tribe lived*, the report says, "*in a community where there were many rum-shops.*" The crime group in this family were all intemperate. Alcoholism was found in three generations and a part of the fourth. But, the report also says, "*when the Jukes dispersed into better localities, many temperate persons were the result.*" (Italics ours.)

Apparently, therefore, intemperance even in this notoriously degenerate family is not altogether the result of inherent defect. It was partly the result of accessibility to drink.

No especially significant light is shed by the report upon the question of the effect of alcoholism in the parents in leading to the same condition in their children as the numbers are too small, and some of those children classed as temperate are still young. In the few cases noted when both parents were alcoholic there were 15 alcoholic and 16 temperate children; in similarly few cases noted where one parent only was intemperate there were 13 alcoholic and 9 temperate children. There were 2 whose habits were unknown. The one mating recorded in this connection where both parents were temperate resulted in five temperate children.

Effects of Change of Environment

What of the future for the Jukes? What has change of environment done for them? In the case of 33 placed in foster homes, the results are still doubtful; some are doing well, but hidden defects may crop out. One in four placed in children's institutions has been improved by care, which promises some gain for these lines.

The group in Minnesota is on the whole slowly lifting itself mentally and morally by marriages with other family strains, and the influence of social pressure toward a higher type of life.

An interesting illustration of the effect of out-marriage occurs in the line of one woman designated as Althea, who was a descendant of Alex, the illegitimate son of Ada, "Margaret, the mother of criminals." Althea's father was an alcoholic, kept a tavern and brothel. Before her marriage she had illegitimate relations, but after her marriage to a German immigrant, settled down. Her one son was alcoholic, lazy and criminalistic. She had four daughters, all of whom were fair or good members of society. One of them was rather silly, but had a good husband and her son is doing well. Althea's oldest daughter was a respectable woman, industrious and fairly neat, and, like her mother, married into a new stock. Her husband was an Englishman. The two youngest of this daughter's eight children are described as slow; one son died under the influence of liquor. But of the other five, all sons, one has a good position as a private secretary; one is a man of fine morals and is a bookkeeper; two are reported as good students, and ambitious men, and the fifth is a normal man. Two generations of out-marriages, separation from the old family associations, are helping this family line to clear itself of its ancestral weaknesses.

The Present Juke Menace

But while there is improvement in some quarters, the Jukes are still a social menace; and perhaps all the greater, now that they are scattered. Of approximately 600 living defective Jukes, only three are in custodial care. They are still reproducing their kind. Estabrook suggests that if these 600 were now to be segregated in suitable institutions, the defective germ plasm would be eliminated in 50 years.

It is to be hoped that if a new Dugdale or Estabrook resumes the study of this family 40 years hence he will not find its numbers quadrupled again as is now practically the case since the first investigation, unless in the meantime the family should have shown a vast improvement. In the growing knowledge of the eugenic perils of feeble-mindedness, it seems probable that eventually some of these defectives will be gathered into institutions for segregation. Others under more favorable surroundings and by inter-marriage with other family stock will improve their lines. The increasing abolition of the sale of alcohol, judging from the Juke experience already noted, will enable some to work themselves clear of such part of the dark family heritage as is mixed up with alcoholic indulgence.

THE ANNIVERSARY OF THE INDIAN MUTINY

BY CHARLES BAILEY

SIXTY years ago, May 10, 1857, commenced the terrible mutiny epoch which occasioned the historic sanguinary struggle for reassertion of British supremacy in India. On that date the native soldiers at Meerat, and a few days later those at Delhi, rose in rebellion against their European officers. The mutiny spread rapidly over a considerable portion of central Hindustan, and for several weeks the continuance of British authority over the vast country was greatly imperiled. Happily, however, for the speedy suppression of the mutiny the millions of population in Punjab and adjacent provinces bordering on the Himalayas, after a little hesitancy, remained true to the British raj, and rendered most valuable assistance in the various campaigns which resulted in the full recovery of British power and prestige.

The campaigns of that strenuous struggle were not without important lessons for utility in the conflicts of the present time. Conspicuous among these were lessons illustrating the truths of temperance teachings. Remarkable facts strikingly proved the advisability of total abstinence methods. At the storming of Delhi, the mutineers, knowing the unfortunate alcoholic proclivities of men of the white races, deliberately placed copious supplies of intoxicants on the route of one of the attacking columns. Had the mutineer leaders possessed sufficient military skill to seize the opportunity which ensued, serious disaster might very possibly have resulted instead of the magnificent victory actually achieved. Regarding the experience of the last fifteen months of the mutiny's suppression, the distinguished militarist, Field Marshal Sir Evelyn Wood, who participated in the engagements of that period, says that "those who drank nothing were the best men."

One of the finest feats of the struggle was Havelock's great "March to Lucknow." For many months several hundred European men, women and children had been beleaguered there threatened with the alternative of famine or a fearful death at the hands of the pitiless hordes surrounding them. Heroically, Havelock with his brave little army, almost insignificant numerically, strove for their relief. Encountering and overcoming untold difficulties, forging his way by forced marches and indomitable resolution, he and his men fought nine set battles in five weeks, each time securing a signal triumph, through country peopled with millions of hostile population. Repeatedly hindered, delayed and thwarted, the general nevertheless at length accomplished his purpose. In Whittier's words:

*"Then a burst of wild thanksgiving
Mingled woman's voice and man's."*

While not absolutely, the "March to Lucknow" was practically a temperance feat. Himself an abstainer of long standing, Havelock countenanced no supply of intoxicants to his men except under stress of extraordinary circumstances. Previous experience had plainly taught him the marked superiority of abstinence practice. He had witnessed the excellent condition of the men besieged for five months at Jellallabad some fifteen years before, with no supply of grog whatever. Their bronzed countenances bore the stamp of robust health. Constant exertion, combined with absence of liquor, and not less the consciousness of noble achievements, gave them an air of confidence and life very different from the depression which was expected to be seen in a body which had so long struggled for existence. After re-



DELHI

lief of the garrison liquor was supplied again, and speedily a great difference became evident both in the conduct and appearance of the men.

During the earlier part of Havelock's march, the efficacy of alcohol from a combined dietetic and medicinal standpoint was specially tried upon one occasion, and clearly disproved. For two days the troops had obtained no proper repast, and were then unexpectedly called upon to fight the important battle of Cawnpore. To have a full or adequate meal before the engagement was impossible. Under such circumstances the commander authorized an allowance of porter with biscuit to be given the men. It was a little after noon; the troops proceeded four miles, and gained a hardly-contested victory ere nightfall. The success, however, was not aided by the use of

alcohol but rather the reverse. A medical officer present who afterwards obtained great distinction, told Prof. James Miller of Edinburgh University of the effect of the alcoholic allowance: "The sun never seemed so hot as that day; men and officers alike confessed that they never before had felt so thoroughly exhausted by fatigue, and there were an unusual number of casualties by sunstroke. Altogether the result of the alcoholic prescription appeared so unsatisfactory to the general that he immediately issued a general order, that, in future, no strong drink should be served out during the middle part of the day, under any consideration whatever."

Of many personal experiences connected with the mutiny struggle, illustrative of the advisability of the abstinence mode of life and of the physical and moral danger attendant upon the use of alcohol, two are particularly noteworthy. One of the most prominent officers during the siege and storming of Delhi was Colonel Hodson. Following the customs of half a century ago, this officer for years had had his daily indulgence of wine, but the stern necessities of maintenance of health and of the vigor requisite to perform active military duties compelled him, according to his own statement, to forego the indulgence and become an abstainer. General Jacob was a man of fine powers of leadership and military instinct, "one of the most gallant soldiers that ever graced the soil of India." Overcome by the incessant demands of the herculean task involved in the command he held during the mutiny period, his health became much impaired, and, as a supposed spur to his physical powers, he began to take brandy. At first there was no thought of alcoholic indulgence; his use of intoxicants was solely for medicinal purposes. But instead of conferring strength the alcohol reduced the strength he had, and, as increasing amounts were needed for the purpose intended, he became a slave to intemperance. His physique was undermined, his will-power sapped, his intellect clouded, and his brilliant career soon ceased. He died thus prematurely, victimized by the delusion that alcohol can really aid in the duties of life, and a clear proof that intoxicants tend to diminish and not augment vitality.

Similar to the experiences of the Indian mutiny campaign were those of the famous conqueror of Sande, Sir Charles James Napier. Addressing, in 1839, a regiment newly arrived in Hindustan, he said: "If you be sober and steady, you'll get on well, but if you drink, you're done for—you will be either invalided or die." He added that a regiment in India he knew well, composed largely of men who drank freely, had been "all but destroyed." Another regiment in which most of the men had been of strict temperance habits, remained one of the finest regiments in the whole service.

HOW A MILITARY RECORD WAS MADE

ONE United States military commander has demonstrated that venereal disease and alcoholism, the two great scourges of army life, are entirely unnecessary and preventable.

It is recorded by Clarence E. Pitts, formerly an officer of the National Guard, New York, that the 18,000 young men of the New York militia were both "on the water wagon" and practically free from venereal disease during the month they were in service policing the Mexican border. And besides this—rather, one might say, in consequence—the division made a splendid record as to efficiency and soldierly conduct.

The story of how this historic military feat was accomplished was secured from the commanding officer, General O’Ryan, by Lieutenant Pitts and deserves to be told, because not only do the generals commanding at the front suffer from these persistent army scourges, through the consequent unfitness of large numbers for service, but also the whole country "back home" through which are spread the diseases and the moral and physical deterioration when the army returns to civil life.

General O’Ryan’s report of how he eliminated the twin evils, alcoholism and venereal disease, from his command on the Mexican border is, therefore, an important document, particularly at this time, when the country faces the possibility of war.

Especially to be noted is what the general says of the educational preparation which gained support for the order from the men under him. His letter tells the story:

HEADQUARTERS DIVISION
NATIONAL GUARD, NEW YORK
MUNICIPAL BUILDING
N. Y. CITY

February 16, 1917.

My Dear Mr. Pitts:—

In answer to your letter of the 10th relative to the abstinence from liquor by troops of this division during the period of their border service, this abstinence was initiated by an order issued by me, known as G. O. 7, amended by G. O. 44, copies of which are attached hereto. These orders prohibited the use or possession by officers and enlisted men in any form during the period of border service.

At the same time guards were placed over all saloons to prohibit soldiers from entering the same.

Sentinels were also posted over several houses of prostitution that existed in our section, and shortly these were all driven out due to lack of business.

The strength of the New York division was approximately 18,000 officers and men, and other than two or three hundred men who violated the order more or less often, as circumstances and temptation prompted, the division abstained from the use of liquor in any form from the date of its arrival on the border to the departure of organizations therefrom.

I believe there is nothing like this accomplished in the history of the army.

No man, no matter what his legal power, may oppose his will effectively in a matter

of this kind on 18,000 men, unless the latter in substantial measure recognize and support the necessity for the order.

It is desirable for you to know, therefore, that the ground work, that is to say the moral ground work, for this order was laid as far back as three years ago.

It is common knowledge that at times there was a use of liquor in the military service that interfered with efficiency. It is notorious that at many of the camps indulgence in liquor played an important part in the activities of the camping period, and that most of the breaches of discipline and neglect of duty which occurred during such period could be traced to the use of liquor.

Reform Instituted

It was therefore scientific management in a military sense which prompted the determination to eliminate liquor as a factor in the training and service of the division on the border. During the past three years the use of liquor was prohibited our officers during the periods of field training camps. The results flowing from these regulations were so obviously good that a strong sentiment among the officers developed in support of the movement. Each year the regulations and their application were tightened until when the border service came the desirability of this regulation was quite generally accepted by our officers, and in large measure by the enlisted men.

Many Men Cease Drinking

This enforced prohibition resulted in many men giving up the use of liquor permanently, for their own testimony is that they found they got along very well without it after two or three weeks of abstinence therefrom. Most of them reported that they felt very much better than they had ever felt in their lives before, due to the combination of life in the open and absence of liquor. Even those who regarded the restriction as rather radical agreed that the results from the military point of view justified its adoption. The prohibition against liquor was explained to the men as not only desirable from the standpoint of moral prophylaxis and health, but as a desirable basis for the development of morals. Voluntary observation of the regulation became as it were a game, in the nature of a test of self-restraint and on disciplined control over the mere desire for indulgence. The officers set the example for the men.

The Splendid Results

Our prohibition experience on the border burned into the minds of all that past customs which justified the use of liquor were improper, unmilitary and subversive of discipline, and should be abandoned.

I think this answers your inquiry.

Very truly yours,

JOHN F. O'RYAN, *Major General.*

Following are the General Orders referred to, bold face being editorial:

THE FIRST ORDER

NEW YORK DIVISION
M'ALLEN, TEXAS

July 16, 1916.

General Orders
No. 7

I. No soldier will appear outside the limits of the camp of his organization with sleeves rolled up or partly clothed. No soldier will leave camp on pass unless by the regimental commander, who shall require the soldier to be neatly and cleanly dressed and understands regulations governing military courtesies, in so far as they affect the duties of soldiers on pass.

II. Regimental commanders may prescribe such regulations governing the issue of passes as may be approved by the brigade commanders. After the receipt of this order all recruits of less than six weeks' service will be carried on the roll as recruits. They will not be considered a part of the strength of the command for guard and details ordered by superior authority. Special attention and instruction will be given recruit detachments, with frequent supervision by commanding officers. The Articles of War will be read and explained to them, with proper record of such reading on the

company records. In the heat of the day, when too hot to drill, they will be instructed in first aid, customs of the service, personal hygiene **including the evils of venereal and alcoholic excesses**, and in sanitation. The efficiency of soldiers being largely dependent upon the character and scope of early military training and first impressions, nothing will be left undone by organization commanders to provide fully and adequately and under the most favorable conditions for the careful drill, training and development of recruits.

III. Officers and enlisted men in this division are directed not to use alcoholic drink in any form during their service on the border, except on prescription of a medical officer given in the line of duty.

IV. Soldiers are prohibited entering houses of prostitution, and saloons where liquor is sold, except under orders for the performance of duty.

V. A copy of this order will be read to each company and posted for ten days on company bulletin boards.

By command of Major General O'Ryan:

ELMER OLMSTEAD,
Major Assistant Chief of Staff.

AMENDATORY ORDER

HEADQUARTERS, SIXTH DIVISION, McALLEN, TEXAS

General Orders

October 30, 1916

No. 44.

I. Par. III. G. O. No. 7, New York division, is amended to read as follows:

Officers and enlisted men of this division are directed not to use, or have in their possession, alcoholic drink in any form, during their service on the border, except on prescription of a medical officer given in the line of duty.

II. The New York division will hereafter be known as the 6th division and will be so designated in all communications. Its station is McAllen, Texas.

By command of Major General O'Ryan:

H. H. BANDHOLTZ,
Colonel, Chief of Staff.

* * *

A MILITANT PRELATE

AMONG all the heroic figures of the war, Cardinal Mercier of Belgium has repeatedly appeared a dauntless figure in the midst of the ruin of his country.

He has been no less courageous in years past in condemning alcohol as a menacing internal enemy of Belgium.

At a great public meeting in Liège in 1908, Cardinal Mercier voiced a ringing denunciation of alcoholism as a social evil in causing great economic waste, physical impairment and crimes against social order, and urged prompt and vigorous action, as will appear in the paragraphs quoted:

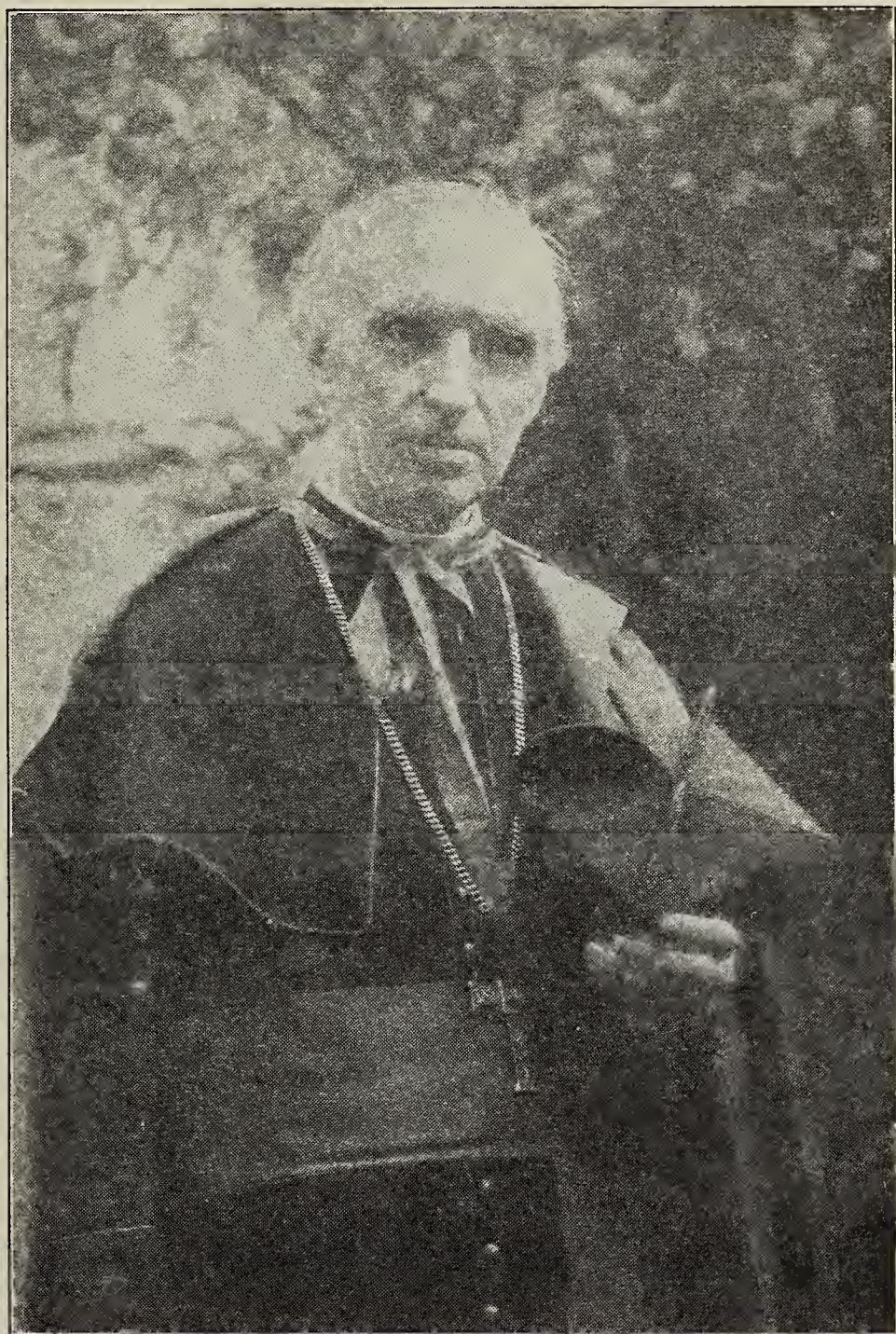
You who hold the Christian faith look around you at those who suffer from the effect of alcoholism. Can we be insensible to the spectacle of this misery and pass by on the other side?

No indeed! I am only discharging my duty as a Catholic, as a priest, as a bishop in coming to co-operate with you in the struggle against alcoholism.

Alcoholism is a social evil. What remedy shall we apply?

While waiting for our government to take action, we have no right to be inactive. Private initiative should act without delay. And first of all be educating public opinion, preparing the way for intervention by law. This is your task, physicians, judges, priests, publicists, fathers, young men and young women.

To convert a drunkard will always be difficult. Prevention is better than correction. Let us preserve childhood, preserve it as it should be, reared by the three-fold co-operation of the parents, who have chief responsibility, the teacher and the priest.



CARDINAL MERCIER

THE WORLD ALCOHOL STRUGGLE

The secretary of the International Temperance Bureau, Dr. R. Hercod, Lausanne, Switzerland, prepares each year a summary of the status of the alcohol question throughout the world. We publish herewith some parts of this summary for 1916 as published in *L'Abstinence* Jan. 10, 1917, some additional notes being interpolated and added to make the record more complete to date.

FRANCE

IN France the alcohol question is permanently the order of the day. On the one hand, temperance committees and organizations have endeavored to obtain greater restrictions on the liquor traffic and more rigid observance of the rules and ordinances in force. On the other hand, the alcohol interests have taxed their ingenuity to prevent action by the authorities or to render them of no effect.

At the beginning of the year, the general in command of the region of Marseilles, having applied with blameworthy tolerance the orders relating to alcohol, was removed by General Gallieni, then Minister of War. Thereupon there was a great to-do among the Marseilles liquor dealers, a protesting strike lasting 24 hours, and above all a tumultuous session of inquiry in the Assembly which threatened the overthrow of General Gallieni.

The order of September-October, 1915, forbidding distilled liquors to women and minors, after having been liberally sweetened to the tastes of the liquor interests, was not even applied with the seriousness that was to have been expected. Leading French women particularly have protested several times against this negligence and have demanded better enforcement.

The Chamber of Deputies has dealt provisionally with the home distilleries question, stopping at a compromise which may open the door to many abuses. Thus the home distiller retains the right to distill for family use ten litres of alcohol without paying any tax. The quantity allowed is certainly minimal, but it is to be feared that the application of the law may bring some surprises.

The great reform of the alcohol situation proposed, in the name of the government, by M. Ribot, Finance Minister, is still awaiting discussion by Parliament.

Meantime, the different temperance organizations, stimulated by the example of Russia, have been stirring up intense agitation with the view of obtaining from the government and from Parliament a radical measure, possibly the prohibition of distilled liquors for at least the period of the war. The National League Against Alcoholism has sent out a petition covered with signatures. It was believed the cause was won when, in the ministerial declaration, the new Minister, Briand, announced his intention to ask Parliament for the right to decree measures indispensable to national defense, among others, the prohibition of alcohol as a beverage, its manufacture being reserved wholly to needs of national defense. But the vehement protests

of the interests were not delayed, and in Parliament the deputies who some days previously were deploring the government's inactivity hastened to reclaim their precious privileges. The measure proposed by Minister Briand has thus been seriously injured.

One notes with pleasure in France a reawakening of organized temperance activity which was thrown into confusion at the beginning of the war. There are the National League Against Alcoholism which is increasing its efforts, the temperance committee called "The Alarm," a new federation, "Pro Patria," which has made work against alcohol the order of the day in its efforts and is devoting itself vigorously to this object. The French women are also displaying great activity. Several of the temperance periodicals have reappeared.

GREAT BRITAIN

THE Board of Control has regulated the consumption of liquor in 24 areas including more than 30,000,000 people. In general, selling places of liquor cannot be open more than five hours a day. [Treating is forbidden and there are other restrictions.—Ed.] Results have been very favorable. Arrests for drunkenness have decreased almost 50 per cent.

Many in England think, however, that these measures are still insufficient, and that at this crisis the government should do more. An influential group demands the nationalization of the liquor traffic, that is, that the government take over in some way the manufacture and sale of alcoholic beverages so as to enable the introduction of all restrictions deemed necessary. The principal temperance organizations, however, have made a vigorous campaign for prohibition for the duration of the war and six months thereafter. To this end, they have secured more than 2,000,000 signatures to a petition. A memorial calling for the same measure has been signed by 1,000 representatives of the aristocracy, of science, and the clergy, and presented to Parliament. [These were almost wholly persons who hitherto have not been actively identified with the temperance movement.]

Food difficulties which make felt in England also the necessity of not wasting valuable food materials like barley in the manufacture of alcoholic liquors (or transportation facilities in conveying them) tend to call for more rigorous measures.

There has been an unconfirmed rumor that the prohibition of spirits would be declared shortly, first in Scotland where there is great popular demand for it, then, also, probably, in England. [With the increase in submarine activity in February (1917) the government placed additional restrictions on commodities permissible for importation. Brewery supplies were not entirely cut off, but were limited to the production of 18,200,000 barrels for the year.]

RUSSIA

PROHIBITION of spirits prevails throughout the empire and of fermented liquors by local option in a very large number of rural communities and cities. The Duma adopted, June 30, 1916, a law which maintains the Pro-

hibition of alcohol, even of fermented drinks, after the war. Only drinks containing not more than $1\frac{1}{2}$ —2 per cent of alcohol are exempt, the others are subject to prohibition in so far as they are destined for drink consumption. A single exception has been foreseen in favor of wine of not more than 10 per cent alcoholic strength. But the communes retain the right to prohibit it. [Recent proposals would permit the sale of wine in the wine-producing districts, but place restrictions on sale to other districts. It is generally agreed that the abolition of vodka was one of the important factors in opening the way to the revolution.]

ITALY

IN Italy the war dealt a heavy blow to the anti-alcohol movement. One by one the temperance papers have discontinued publication. There remains only the monthly review, *Contro l'Alcoolismo*. The Italian temperance organizations except, we believe, the Blue Cross of Milan, have ceased activity. Evidently the roots of the movement were still too feeble to resist the shock of war. Yet various leaflets appear containing hygienic advice for soldiers which give the alcohol question the importance which belongs to it, and there has been the resounding article on alcoholism by M. Leonardo Bianchi of the Ministry in *Nuova Antologia*. For economic reasons the government has ordered liquor selling places to close at 10:30.

ROUMANIA

ON the entrance of Roumania into the war announcement was made that the government had taken measures equivalent to almost complete prohibition. Since that time no precise information concerning the matter has been obtained.

GERMANY

NUMEROUS measures restrictive of alcohol consumption have been taken by civil and military authorities. However, the wishes expressed by temperance workers and their friends in the press and through numerous meetings and petitions looking toward the total prohibition of distillation for drinking purposes and the introduction of the beer card have not been granted. In spite of the need for food which exists in the empire, the use of food materials in breweries and distilleries continues to some extent.

Still, the production of spirits has been considerably limited, and there was organized in April, 1916, an imperial office for spirits which is equivalent to the institution of a monopoly. Only the small distilleries producing less than 10 hectolitres annually and the agricultural distilleries of fruits and mash are exempt. In 1916 distillation from grains was prohibited. Distillation from potatoes has also been much reduced. The activities of the director of food supplies, Von Batocki, have not much satisfied the wishes of the temperance group.

The malt production for the year was about 48 per cent of the normal. Bavaria, particularly, in the interest of its national industry, was opposed to greater limitation. Several times, even in the Reichstag, the introduction of the beer card has been called for on the ground that if beer is truly "liquid

bread" there seems small logic in allowing those who use it to have the right for the same amount of "solid bread" as the non-users of beer.

A number of new ordinances have limited the sale of drink. The sale of beer was limited in September to the hours, 7 to 10 p. m. on week days, 4 to 10 p. m. on holidays and Sundays. Only half a liter per buyer can be purchased; one liter for off consumption. These restrictive measures have been much softened in the sense that local officials have been given authority to fix the duration of hours of sale and more than a litre may be purchased to carry away.

Severe orders concerning the sale of distilled drinks have been issued on the southern front; in Styria, Carpathia, the Tyrol and the Vorarlberg, at Salzburg and in Dalmatia such sale is interdicted on Sundays and holidays with complete prohibition for soldiers.

SWEDEN

THE situation in Sweden from the temperance point of view is not cheerful. The masses seem to be won to local prohibition, but in the Rikstag the Upper House chosen by limited suffrage always resists a reform for which the Lower House of democratic disposition has several times declared itself. Thus this year again we have had the debate, now a classic, in the two Swedish Houses, over local option. The Upper House defeated it by a vote of 85 to 52 while the Lower House voted for it almost unanimously.

The temperance organizations undaunted keep up intense agitation through the press and public meetings, and this year by a national deputation composed of delegates from temperance, religious and philanthropic bodies chosen from all the provinces. It expressed to the government and the king the wishes of a large part of the nation either for the local veto or for prohibition of spirits during the war. This movement has not yet borne fruit. The situation in Sweden should not be painted in too dark colors; there are many countries which would envy her. Of 2,409 rural communities in Sweden 1,424 (60 per cent) are entirely dry, that is, have no sale of alcohol.

The card system of governing the sale of spirits, first introduced voluntarily by several cities, was extended January 1, 1916, to the entire country. The results are decidedly favorable. The government has decided, without much enthusiasm, seemingly, on several restrictive measures justified by the crisis from which Sweden also suffers in consequence of the world war. From November 16, 1916, to October 1, 1917, no more than two litres of spirits a month might be sold for home consumption. The sale of ordinary distilled liquor for consumption on the premises is permissible only if the order includes a meal costing at least 50 oere (about \$.13), and no more than one glass holding not more than 5 cl. (1-2 oz.) may be served to customer. Various restrictions have been laid upon the sale of wine and beer. Moreover, the sale of spirits for off consumption is forbidden on Saturday or on the eve of a holiday, beginning at 2 o'clock in the afternoon. No sale for consumption on the premises can be made before noon.

A quite important minority of the temperance forces led by Prof. J.

Bergmann, historian of the world movement against alcoholism, unsatisfied with the government's evasion demands a more energetic policy looking toward complete prohibition of alcohol, because it considers that this definite solution would be more likely to be understood and supported by the great mass of the people. The majority prefer to hold to the propositions of the extra-parliamentary commission, one part of which asked for the local veto, the other for such restrictive measures as were first tried in Sweden by Dr. Ivan Bratt.

NORWAY

As the new parliament elected in 1915 includes 62 abstainers, about half its effective force, over and above a certain number of members who favor the program of the anti-alcohol party, one might have expected rigorous measures to be taken by the government. But it has not so turned out. Probably the grave questions of foreign policy which several times during the year have disquieted Norway have prevented the government from preparing for decisive temperance reform.

Yet, progress is being made. Abstinence has been made obligatory during the period of service in the navy, the army, and in the professions entailing special responsibilities. During the general strike last summer, there was prohibition of spirits, and local authorities in several places prohibited fermented drinks. Through the holidays (Dec. 18, 1916-Jan. 8, 1917) the importation and sale of spirits were prohibited.

DENMARK

THE year 1916 has been one of preparation in view of the coming revision of the law governing the sales of drink. The Extra-Parliamentary Commission on Alcoholism is at work and already has gathered a large amount of valuable material. The temperance organizations have done educational work in the army which is partly mobilized for territorial defense. There has been an active movement for prohibiting the sale of spirits on Sunday. In spite of the war, the number of Danish abstainers is increasing and now exceeds 200,000. A one month's trial of prohibition of spirits is said to have been ordered in March, 1917.

HOLLAND

THE Dutch government has prohibited exportation of spirits; then it forbade the use of grains in spirits manufacture. In April, 1916, a league in behalf of local option was organized to continue the work so brilliantly begun by the petition of 600,000 men and women for local option. Doubtless except for the war the government would already have taken up the matter. Some of the Dutch societies have taken steps to obtain from the government measures restrictive or prohibitive of alcohol when the army demobilizes.

SWITZERLAND

IN connection with the discussion of financial reform is involved the question of the tax on beer and the extension of federal legislation to actually free distillation. A largely supported petition was sent in June to the Federal Council favoring the suppression of the free distillery.

There is a growing movement to promote the non-alcoholic use of fruits.

Three permanent establishments for work among soldiers have been open during the year. Alcoholic excesses among German, French, Belgian and British soldiers interned in Switzerland have led to anti-alcohol work among them by the Swiss Anti-Alcohol Secretariat and the International Temperance Bureau at Lausanne with the consent and support of the army surgeon. Temperance societies in the interested countries and various societies in neutral countries support the work.

AUSTRALASIA

IN New South Wales, South Australia, and Tasmania the closing hour of selling places has been fixed at 6 p. m. In Queensland a general local option vote will occur in 1917. All states of Australia now have local option.

CANADA

AT the end of 1916 the colony of Newfoundland was legally dry and all the provinces of the Dominion of Canada had prohibited the sale of liquor except Quebec, which nevertheless has abolished the sale of liquor in two-thirds or more of its towns and cities by local vote. A plebiscite in Yukon territory during the year defeated prohibition by only three votes.

UNITED STATES

FOUR states, Michigan, South Dakota, Nebraska and Montana, were added at the fall elections to the 19 which had previously voted for prohibition. Propositions to weaken prohibition laws by exempting beer or by weakening other provisions of the laws were rejected in several states, notably Colorado, Oregon, Washington and Arkansas.

[Since January 1, 1917, the Supreme Court of the United States has confirmed the Webb-Kenyon act making it possible for states to keep out interstate shipments of liquor. This has been followed by bone-dry legislation in many states forbidding the importation of liquors and in some instances the possession or sale of liquor for any purpose. The 1917 Legislatures of Indiana, New Hampshire and Utah have enacted state prohibitory laws. The Florida Legislature voted to submit a prohibition measure to popular vote in 1918.]

The Congress voted by the Reed amendment to prohibit transportation of liquor by interstate commerce into states prohibiting its sale, passed a law prohibiting the liquor traffic in Alaska following a popular vote for prohibition, closed the mails to the carrying of advertisements of liquors to states prohibiting such advertising, and prohibited the liquor traffic in the District of Columbia, the national capital.

The situation created by the declaration of war has brought into sharp relief the wastes due to liquor, especially in foodstuffs and human efficiency at a time when both are in the highest demand. Influential persons of all classes who had never before favored prohibition are demanding "war prohibition." A memorial for national prohibition without the war limitation clause signed by more than 1,000 leaders from all parts of the country was placed before Congress in April.

THE UNDERMINED MODERATION PLATFORM

NEARLY twenty years ago, at a meeting of physiologists from Europe and America at Cambridge, England, certain of them were asked by an American representative to sign a statement containing the affirmation that "none of the exact results hitherto gained can be appealed to as contradicting from a purely physiological point of view, the conclusions which some persons have drawn from their daily common experience that alcohol so used (moderately) may be beneficial to their health."

Not all, but many, of those attending the congress signed the statement, some with more or less important modifications.

About a year ago Mr. Koren, statistician and good friend of prominent brewing officials, referred to the Cambridge statement in one of a series of articles in the *Atlantic Monthly* and opined that science today can make no other reply to the question of the use of alcoholic drinks than the one that was there made. It is to be hoped that all who read those articles will read the series since published in the same magazine written by Dr. Eugene Fisk, of the Life Extension Institute, with which are connected some of the foremost American physiologists and representatives of other branches of medical science.

In these articles Dr. Fisk marshals the knowledge of the present time concerning, not immoderate drinking—everyone admits the harmfulness of that—but of the so-called moderate drinking, a term too elastic for strict scientific accuracy, but generally understood as meaning drinking without getting drunk.

The evidence shows the detrimental effects of alcohol upon mental and muscular working ability, upon the various provisions of the normal body for the resistance of disease, upon the general duration of life, and the danger that even a daily glass or two of beer will lead to further drinking.

The Cambridge statement referred to was framed and obtained for the purpose of discrediting the teaching of the American school physiologies, in which evidence similar to that just given by Dr. Fisk in the *Atlantic Monthly* was presented, and upon nearly the same points. It had been obtained fresh from laboratory reports and findings published, but not yet incorporated in conservative medical textbooks, as it is today. The publication of the Cambridge statement by a body of men with whom Mr. Koren was then actively associated, no doubt weakened the faith of many teachers in the value of the school textbooks, especially in the conservative East where the leaders of the attack had most influence.

These articles ought to go a long way toward removing the last vestige of doubt as to the reliability of the precise scientific investigations that leave no standing ground for the long cherished belief in the harmlessness of alcohol when used "moderately."

The favorite argument of the alcohol defenders that they have known men who used alcohol during a long life and were not harmed by it—as far as they were qualified to judge—is matched by Dr. Fisk's extended experience which leads him to deny ever having seen a man for whom the more or less steady use of alcohol did not carry a menace. It is overmatched by Dr. Stockard's guinea pig prototype, the moderate drinker of which showed that an amount of alcohol that had no apparent effect on the individual's health, appetite or vigor, resulted in defective descendants. As Prof. James said of Rip Van Winkle's drinks that he could not count, they are being counted and registered, nevertheless, down among the cells and tissues, and the counting loses none of its seriousness when it is postponed a generation.

The widespread circulation of all the reliable knowledge we have concerning the effects of alcoholic drinks is not less but more urgent as the laws against the traffic in them multiply, both for the enforcement of the laws and to guard against the practice among the uninformed of providing themselves with liquors by brewing and fermenting in the homes.

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LEADERSHIP BY PHYSICIANS

WITH increasing frequency one finds in medical literature statements of the opinion that physicians should assume the leadership in promoting measures for the prevention or amelioration of drunkenness. This sign of recognition of responsibility is indeed welcome to those who have been long engaged with the struggle for the prevention of this great evil; but whether the public should be taught just now to look wholly to the doctors for advice as to methods of preventing drunkenness, is a matter that calls for careful and frank consideration.

As Dr. Irwin H. Neff, of the Norfolk State Hospital, Massachusetts, said in a recent paper on the subject, "Inebriety is a medico-social subject." Whether the medical profession has made a sufficient study of the social part of the subject to assume entire responsibility for the large program necessitated is a legitimate and not disrespectful question.

One feels all the more like asking the question when one reads in Dr. Neff's article the statement that "the ignorance of the physician to the true clinical significance of inebriety is proverbial. The neglect properly to instruct the medical student and a natural disinclination of the physician to seek for knowledge which is but imperfectly described, may be offered as justifiable excuse for this unenlightenment."

In other words, just at present the medical profession does not claim to have a clear or comprehensive knowledge of the medical side of this medico-social subject, and consequently, is not prepared, as a body, to assume entire leadership, much as such leadership would be welcomed by the laity, if the necessary preparation had been made.

On the other hand, care must be taken not to jump to the conclusion that the progress made in the battle against alcohol owes nothing to this pro-

fession. Individual physicians have been leaders and advisers in the agitation from the days of Dr. Benjamin Rush to the present. They have given inspiration to the spread of knowledge of the subject derived from careful research, as did Dr. Benjamin Ward Richardson, of London. They have struck telling blows against the fallacies that gave undue valuation to the use of alcohol in medicine and against popular ideas of its harmlessness, as did Dr. N. S. Davis, founder of the American Medical Association. And now, from important posts on state and city boards of health, they are teaching the public the claims of total abstinence.

That branch of the medical profession from which has come the most information about the injury from alcohol has been that of the specialists in mental diseases and in the care and treatment of inebriety, because the finished products of alcoholism naturally drift to their offices. And right there appears to lie an objection to inviting the medical profession just at present to assume leadership of the entire movement against alcoholism.

As Dr. Neff says in the article already referred to, "Inebriety is but one phase of alcoholism," and by "inebriety" he means drunkenness. It is natural, therefore, that these specialists should look for, and find, symptoms of an unstable nervous system in the class of patients who are brought to their clinics.

It is logical that they should plead, as Dr. Neff does, for earlier treatment of those who practice getting drunk until the alcoholic symptoms are confirmed and are attended with recognizable physical and mental ailments, or until a desire has been established which has as its cause "a physiologic element of nerve habit."

But is this plea for the early recognition of the psychopath in the man who gets drunk and for his prompt treatment as far as the medical profession is ready to go in the prevention of alcoholism? What does it do for that class of alcoholics who never get drunk, but who go around with their tissues saturated with alcohol, subjecting themselves to its poisonous effects until they develop liver cirrhosis, heart disease, Bright's disease, or some other slowly fatal result of deranged metabolism? In their case the effects are manifested in some other part of the body instead in the brain.

It is well if there is, as Dr. Neff says, "a natural disinclination of the physician to seek for knowledge which is but imperfectly described," if by that is meant that he wants to be sure of his facts. Because that desire will lead physicians who are awakening to their responsibility in the matter to prepare themselves by thorough study for the part they are to take. They will begin to ask such questions as

If the alcoholic is a born weakling, what started the hereditary taint?

Dr. W. A. Potts has said, "We are not going to assume that Cain was neuropathic and Abel was not, and that settles the whole matter forever."

What becomes of the psychopathic condition, in what way is it expressed, when the drunkard is cured of his alcoholism, or reformed by social or religious influences?

If such a weakling, or alcoholic psychopath, is unable to support himself or his family in an alcoholic environment, but becomes able to do so respectably when his town or state goes dry, what does the fact indicate as to practical methods of preventing alcoholism in his whole class of subjects?

Which is the more economic course for a community, to have physicians on the watch for psychopaths, that is, for those who get drunk, to provide places for treating them and missionaries able to convince them that they need treatment, or to free the environment from the unnecessary substance, without which former "psychopaths" get along without abusing their families or becoming otherwise notorious and dependent?

Something like this will run the line of study which the medical profession will wish to pursue thoroughly, before assuming the place that is waiting for their leadership in the prevention of alcoholism.

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THE PROBLEM OF THE HABITUAL DRUNKARD

THE editor of *American Medicine* (February, 1916) finds an interesting item in a recent decree of the Austrian government that henceforth habitual drunkards in Vienna are to be considered in the same category as the insane and are to be treated on the same basis. That is, they will be shut up.

This the editor of *American Medicine* thinks is a splendid step in advance. "The man who cannot control his craving for liquor (or drugs or crime) is not normal." Therefore it seems to the editor quite reasonable that he should be "removed from the circumstances which promote his weakness."

The propriety of removing the "circumstances" out of the path of the drinker does not seem to occur to the editor, although he recognizes that the habitual drunkards are numerous enough to present "one of the most difficult problems of the municipal authorities and of all social workers."

One may gather from this that the editor does not regard the habitual drunkards, who give so much trouble to municipalities and social workers, the result of the cumulative effects of long continued drinking, and their craving a parallel to that which develops under the use of opium and kindred narcotics. Instead he appears to look upon this troublesome army as the outcome of some inscrutable freak of nature, or plan of Providence. There is no hint in the editorial that we should attempt to stem the source of the supply; rather content ourselves with punishing the unfortunates by shutting them up when their weakness becomes manifest. And as this usually occurs late in life, after they have reproduced their kind, we thereby simply ensure the continuance of the problem to our descendants.

It is high time that this stoical attitude ceased and that our boasted intelligence, which in the material world moves mountains and is able to play at will upon the laws of heredity in animal breeding, should gather up

for serious study and existing clues to the production of human weaklings, habitual drunkards included, if they belong to this class.

Logical thinkers must admit that if physiological and medical knowledge owe much of their advance to the results of animal experimentation, there is no excuse for turning down the evidence derived from precisely controlled tests of the effects of alcohol in animal propagation, particularly when there is so much coincidence between the effects of alcoholized parentage in animals and the by no means insignificant amount of corresponding observations collected from human life.

Dr. Stockard's guinea pig experiments now command first attention in animal studies of alcoholic heredity, because he has continued them for so long a period, over five and a half years, on so large a scale, including now more than 1,500 animals, and with the suggestions for improvement in methods furnished by the results of so many preceding experiments.

The great question to settle in the problem of human alcoholic heredity is the origin of the weak strain. This does not presuppose that alcohol is the only cause of heredity weakness. It is enough to establish that it is one of the means capable of originating injury to the reproductive cells of animals, analogous to those of man. If that is established, then our course is to treat it as we do other known causes of hereditary injury, lead poisoning, and the toxins of syphilis and other infectious diseases—eliminate it.

But as soon as total elimination of alcohol from human beverages is suggested, the objection is at once raised that only heavy drinking can produce such injurious effects. "It is manifest," said Dr. Harry Campbell, in the discussion of Dr. Ballantyne's paper (printed elsewhere in the JOURNAL) that if an individual spends the fetal and embryonic stages of his existence in a state of chronic drunkenness he cannot attain to a healthy maturity."

Such was not the case, however, in the prenatal condition of Dr. Stockard's defective guinea pigs. Many of the worst cases had normal mothers. There was no alcoholic drunkenness during fetal and embryonic existence. The alcoholism was confined to the male, father, grandfather or great-grandfather.

Even in the pre-embryonic stage the male ancestors were not in a condition of chronic drunkenness. The alcoholization was stopped short of intoxication, and although long continued *it was not enough to produce visible signs of injury*. Those alcoholized guinea pig forbears did not present the picture of the chronic inebriate. A man in their state of alcoholization would not have been proposed for confinement like the criminal and the insane. He would have been regarded as a normal individual who knew how to control himself, or who was not so susceptible to alcohol that he could not "carry" an ordinary amount without showing the effects.

The alcoholized guinea pigs continued to grow, became fat and vigorous, had good appetites and behaved quite normally. Even post mortem examinations failed to show noticeable structural changes. They furnished a fine

analogy to the moderate drinker who is held up as a model for users of alcoholic liquors.

But these animals were preparing for their posterity injured chromatin substance which passed on and lived in the bodies of their descendants for years, to the third and fourth generation, and produced all degrees of defects, down to animals without eyes, with deformed feet, with undeveloped nervous systems, with paralyzed limbs or paralysis agitans, as well as with undeveloped organs of sense.

There is no chance for the supposition that the defectiveness did not originate with these alcoholized progenitors for every one of these before alcoholization was tested by normal mating and found to produce normal, strong and vigorous young. After their alcoholization they started the defective line.

Nor can the deep significance of the experiments be escaped by the other supposition offered by Dr. Campbell on the same occasion, namely, that guinea pigs are evidently highly sensitive to alcohol. They were not sufficiently sensitive to be visibly injured by amounts of alcohol which blighted large percentages of their progeny.

Austria has no doubt taken an advance step, for her, in shutting up the finished habitual drunkards; but the United States is taking a more advanced step in prohibiting the "circumstances" that promote their continuance.

* * *

EFFECTS OF ALCOHOL ON HAND AND TEMPER

AN interesting item of information concerning the effects of alcohol on working ability comes out in the details of the experiments carried out in 1906 by Dr. W. H. R. Rivers and his associate, Mr. H. N. Webber, in Cambridge, England.

Both did the same work, with the same doses of alcohol, one of 20 cc. and the other of 40 cc. (One pint of 4 per cent beer contains about 20 cc. of alcohol.) Their method differed from that of previous experimenters chiefly in having the liquid containing the alcohol so disguised that they could not tell it from a control mixture containing no alcohol which they took on the non-alcohol days.

By keeping minute records they were able to compare afterwards the experiences and feelings which they had no means of associating with alcohol at the time.

With Mr. Webber, who was an abstainer, it was found that not long after taking the alcohol, probably within half an hour, there came on certain other symptoms, of which the most obvious to himself were lassitude and disinclination to use either mind or body. Totterman also observed a feeling of extra fatigue on alcohol days (p. 117). It was also certain that the movements were slower than usual. In the normal condition, the two minutes between the periods of work, which were used for taking observations and for adjustments of the apparatus were ample for these duties. But on

the days when he had taken no alcohol the two minutes were hardly sufficient for doing what was necessary, although the time seemed no longer than usual. "This was so striking," says the report, "that the subject was at first inclined to believe that the watch was in error, for it seemed to him that he had been carrying out his usual task at the normal speed."

What follows is of special importance to industrial workers and employers:

The control of movement did not seem to be as good as normal. Several small accidents happened on days on which the dose of medicine was 40 cc. and these were probably the result of awkwardness in adjusting the apparatus. Some of the intervals were occupied in drawing lines for tabular purposes or in pasting ergograms in a book, and these operations were found afterwards to have been done roughly or irregularly on the days on which the larger dose of alcohol had been taken.

During the state of lassitude there was decided irritability; and a fellow-worker during the long experiment of July, 1906, states that he was able to recognize clearly the days on which the larger dose had been taken by the general demeanor of the subject—partly by means of the lassitude, partly by the very obvious irritability.

It is doubtful how far the state of lassitude was preceded by one of exhilaration, but, if it occurred, it was certainly of very brief duration.

It is especially noted that these effects of alcohol at first tended to arouse interest, but after a day or two this ceased, and the only desire of the subject was to carry out the appointed work of the day without disturbance, with no feeling of interest in the result.

These pronounced general symptoms only occurred on the days on which the dose of alcohol was 40 cc. and they were much more noticeable in the second experiment with this dose. With the dose of 20 cc. giddiness was occasionally noticed, and the other early symptoms may possibly have been present to some degree, but they were not sufficient to enable these days to be distinguished.

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PRESERVING PATHOLOGICAL SPECIMENS WITHOUT ALCOHOL

THERE is an old epigram to the effect that alcohol is good to preserve dead tissues but no good for the living cell. Even this credit for alcohol is being crossed off by the work of Dr. Henry K. Craig, associate professor of pathology and bacteriology and curator of the pathological museum of George Washington University, Washington, D. C.

Specimens preserved in alcohol even according to the best known methods did not keep their colors or appearance of freshness. This fact, coupled with the cost of alcohol, led Dr. Craig to seek a new method which four years' experience has proved to be highly satisfactory, not only in reducing the cost but in securing better results. The chief factor in the new method is simply a saturated solution of salt. Dr. Craig in a personal interview states that with a few cents worth of salt, he can do work that would require several times as much expense with alcohol. Old specimens, prepared according to the finest German methods, which had lost their color, Dr. Craig was able to restore to their natural gross colors by immersion for several days in the saturated salt solution.

Further experiments showed that a solution of potassium nitrate and potassium acetate used in conjunction with the salt solution would restore

even finer tints of the specimens, so that the use of alcohol could be wholly avoided.

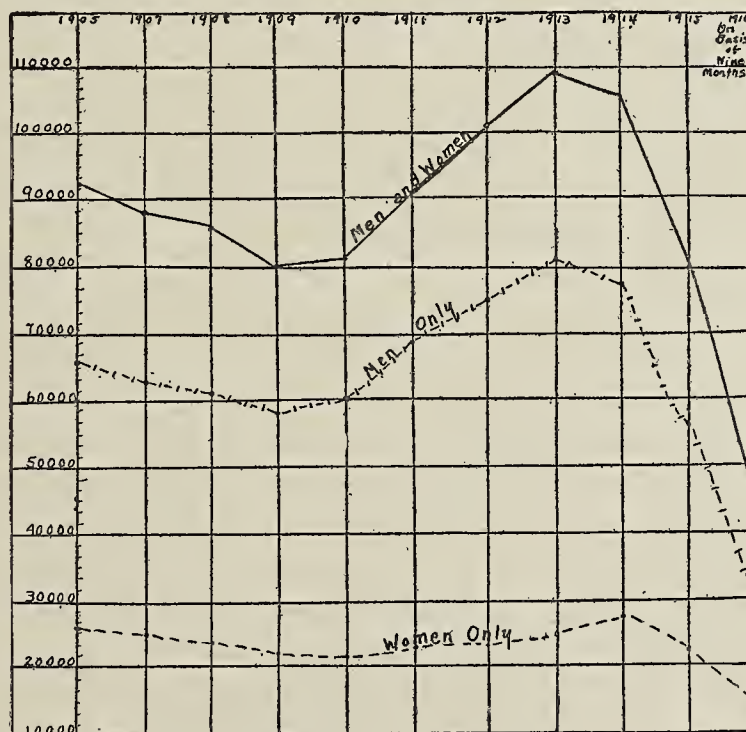
Dr. Craig now uses a series of four solutions, the first containing formaldehyde, potassium acetate, and potassium nitrate. After from one to five days in this solution, the specimen is then placed in the saturated salt solution which extracts the formaldehyde and develops the gross colors. It then goes to a solution of potassium acetate and potassium nitrate for the development of the finer colors. It is finally placed in a glycerin preservative fluid containing also potassium nitrate and a small proportion of formaldehyde to prevent the growth of molds.

Daylight and direct sunlight do not affect the variety and brilliancy of the colors. The specimens do not shrink. Even when dried in the air for several days specimens re-treated with the saturated salt and following solutions have given excellent results in recovering not only the form of the original but the fine colors obtained when originally preserved.

Dr. Craig first reported this work in the *Journal of the American Medical Association*, April 18, 1914. The method has now been tested for four years with exceedingly satisfactory results.

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This chart from **The London Times** shows the continued decline in drunkenness in London and the 15 largest cities and towns in England. Out of a total population of 13,263,141, there were during the first nine months of 1916, 46,008 convictions of men and women for drunkenness, as against 80,091 during 1915 and 106,297 in 1914.



To this statement from the **Times** must, however, be added the consideration that a part of the decline in drunkenness among men is attributable to the fact that so large a number have been drawn out of civil life into military service, so that not all of this decline can be attributed to the new restrictions by the Board of Control upon the sale of liquor.

THE SOCIAL VIEWPOINT

DRINK'S HAND ON THE FAMILY

The Boston Children's Aid Society has had an honorable service of over half a century in caring for children needing homes or relief. The fifty-second annual report for the year ending September, 1916, has a section devoted to the factor of alcoholism in the work of the society. It shows that in about one-seventh, 13.5 per cent, of the 731 new families dealt with in the course of the year, at least one parent was alcoholic. An interesting feature of this report is the fact brought out that these alcoholic fathers who fail to provide for their children are not, in general, unskilled laborers of low mentality, but capable, when working full time, of earning good wages.

WE DO NOT come into contact with as many cases of alcoholism as the Associated Charities and the Society for Prevention of Cruelty to Children, for example. We do, however, receive a fairly large number of applications from homes where one or both of the parents are alcoholic. That is, people who cannot get along without some alcoholic beverage, who cannot be temperate in the use of it, are frequently intoxicated by it, and thus lose their work and wages to the real distress of their families and themselves. Usually it is the man who is the alcoholic and who by reason of the patient support and endurance of a good wife struggles through intermittent drunken periods, often lasting for years. In 101 families, or 13½ per cent of the 731 new families dealt with intensively during the year, at least one parent was an alcoholic and in eight of these homes both were alcoholics.

There are many saloonkeepers in Boston who will not sell liquor to a man who is bordering on intoxication, and there are many who are reluctant to sell to the man who is being evidently injured by reason of his drinking. Yet there are many others having no such compunctions and who frequently sell without question to whoever comes to buy. If Boston is not to have a no-license regime, it should at least have fewer saloons. The keen competition for business amongst the liquor dealers is evidenced in many of these 101 families.

It would help the Licensing Board in the process of weeding out saloons if it had a card index of all men and women known to the courts, penal institutions and public and private charities as alcoholics, or as people whose drinking was reacting on their families. There may be legal complications in the way of keeping such a "black list" now, but some way can be found whereby the large number of known inebriates can be registered. If the names were checked by neighborhoods, an intelligent step could be taken to reduce the number of saloons in certain sections of the city already overprovided. Certainly it is legal and proper to keep a list of all men and women brought into the courts for inebriety and also to require all public and private hospitals treating inebriates or persons suffering from alcoholism to report their names and addresses.

It would be of value if for a period of five years, or even less, each charitable society in the state should be asked to report annually the names of all alcoholics and semi-alcoholics aided by them. The total would give some knowledge of the real extent of alcoholism and would certainly be in excess of all arrests for drunkenness, for many alcoholics are never arrested. Few of the 114 parents in the 101 families referred to have been in court on the charge of drunkenness.

One man known to us has been a hard drinker for years. His chronic condition is that of partial intoxication, yet he is able to work and bring a certain amount of support to his wife and five children. Words fail the writer of this statement to describe adequately the repressed abuse which he metes out to his family during practically every minute he is at home. It is un-get-at-able abuse, yet it has ruined the mother's health and is ruining the health of his children. It may be that prohibition is an unwise measure, but before we say it is, let us as good citizens first examine the facts.

Boston will not readily accept the individual license cards in use in some European countries, but we may be driven to such a practice in order that checks may be imposed on the drinking proclivities of a certain portion of the population of Boston and the surrounding towns.

It would be interesting also to study the families with alcoholic members coming to our attention in the light of their appearance a few years later as subjects for the consideration of the Society for the Prevention of Cruelty to Children. Many of these families, first known to us, ultimately get to this society and the application to us for perhaps temporary care during the mother's illness becomes a charge of neglect or something much more serious with the latter agency. And by this time the habit of drinking has usually gone beyond the remediable stage.

We brought some of these alcoholic fathers into court in an effort to make them provide for their children's support. In many instances they were engaged in skilled occupations and would waste a weekly wage of \$20 or \$25 and then claim lack of funds as a reason for their inability to meet their obligations. Estimating conservatively, the care of children of alcoholic parents through the year involved a total charge amounting to \$10,000, which was largely met by contributions and income from endowment. One little girl, pre-tubercular, the daughter of a pronounced alcoholic, who has remarried and is now raising a second family of neglected children, has cost us along in ten years approximately \$1,000, and the father to offset this large expenditure has contributed in all this time just \$375. To prosecute him for non-support means that he will demand the child's return—we cannot get guardianship—and to return this frail little girl to his home will result in her speedy death.

It is frequently remarked that the alcoholic is generally of low mentality and of unskilled occupation, but this has not been our experience. Our alcoholic fathers are usually engaged in the more skilled trades and when working full time earn good wages. We are having, of course, the alcoholic

of low mentality and are charting generations of alcoholics in some of the families we reach.

The medical men are disinclined to accept at par many of the statements made by social workers with reference to alcoholism, and undoubtedly there have been inaccurate interpretations by social workers. The next step, it would appear, is a joint committee of doctors, alienists, and social workers for Boston, this committee to help define what we mean by the term "alcoholic," and to determine the value of the social worker's case history material. The mental factors have to be more clearly defined, for some that we call straight alcoholics the doctors may diagnose as having conditions of alcoholism superimposed on feeble-mindedness or insanity. This may mean that the social workers are slighting the mental side, but they in turn feel that the medical men are slighting or counting of little value the enormous amount of data on the social side.

The following strains of alcoholism occur in these 101 families above mentioned:

1. Father, mother's grandparents and great aunt; 2, father, mother's mother and uncles; 3, father, mother's father; 4, mother's mother and her family; 5, mother's mother and father; 6, father's parents, mother's father and her uncles; 7, father, his father, mother's father; 8, mother's father and her three uncles; 9, father, his father, mother's parents; 10, father and mother, mother's father; 11, mother, her parents, also her step father; 12, father's father and grandfather; 13, mother's parents; 14, father, formerly alcoholic (not for six years), his adolescent boy, a case of acute alcoholism.

Seven of these above fourteen families also have histories of illegitimacy which in some instances run back generations. Thirty-four of the total 101 alcoholic families reported illegitimate children.

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ONE HUMAN EXPENSE ITEM

A FEEBLE-MINDED woman, Edna T., in Ohio, reported by the Cincinnati Juvenile Protective Association from its recent study of feeble-mindedness (See page 169), has three feeble-minded delinquent children in public institutions at a known cost already of \$4,824 to the city and the state. She is imbecile, weak, nervous and occasionally drunk.

Her father died at 50 from the effects of alcohol. Her mother went insane and had to be placed in an insane hospital due to the terror she experienced when her husband was having his orgies.

One of her brothers is a feeble-minded, drunken sot. Another had sporadic sprees, when he became violent and uncontrolled. One sister is a harmless alcoholic wreck, even worse off mentally than Edna, and so degraded that her children will not take her into their homes. Of her six children, one is feeble-minded and one highly neurotic.

Edna's husband died at 30 of pneumonia and softening of the brain.

Their oldest child has been a ward of the Juvenile Court for years. Unable to hold a job because of mental deficiency, he has become criminal. The second child is moody, feeble-minded, won't learn, is difficult or impossible to handle satisfactorily either in a private home or an institution. The youngest child is deformed in legs and arms, has the appearance of a cripple, and at 14 years of age was mentally only nine years old. She was born and has spent most of her life in public institutions and is now in an institution for the feeble-minded. Of the 23 descendants of Edna's alcoholic father, 18 have been in public or private institutions.

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A MESSAGE FOR GIRLS

YOUNG women should be warned in our colleges and high schools, girls should be taught in our homes to hate the alcohol habit chiefly for the harm it does to the children of those who are enslaved by it, says Cleveland Moffatt in *McClure's Magazine*, March, 1917. They should be told plainly that the procreative powers of the heavy drinker, or even of the steady, "moderate" drinker, are seriously impaired, not always sufficiently, however, to prevent him from having defective children. I know a California girl who married a brilliant graduate of Harvard University. She married him after he had proved his devotion to her and his strength of will by entirely abstaining from alcohol (he had become a rather heavy drinker in his senior year) for twelve months following his graduation.

Alas for these good intentions! Soon after their marriage he began to drink again and, in spite of every effort this fine girl could make, in spite of her wealth of love, he continued to drink until degrading conditions led to a divorce. And this man's child by another woman who caused the divorce, a drinking woman, was born dead! . . .

As illustrating what hereditary damage is done by even moderate drinking, I may mention the case of five distinguished brothers who, 25 years ago, were heads of corporations, bank presidents, men who made and spent large sums of money. One of them held a very high position in the United States government. They were all moderate drinkers and all died at a good age, apparently none the worse for this indulgence, **but—**

Of their 18 sons, not one made a success of his life. All were either steady drinkers or heavy drinkers. Two-thirds of them died before they were 35, and only one of them reached the age of 50. This one, a friend of mine, a man in poor health, admits that he cannot live without whisky. His only daughter, a young woman of 28, died recently of cerebro-spinal meningitis and her little child of four has been attacked by the same disease. . . .

The clear-eyed girls of America may well ponder these truths before they give themselves to alcoholics or near-alcoholics, who, through physiological impairment, will be unable to satisfy the motherhood longings of a fine woman, or, at the best, will give her only inferior children.

AMONG THE MAGAZINES

COMPARATIVE INSANITY AMONG MEN AND WOMEN

THE medical superintendent of the Glasgow Royal Asylum, Dr. Oswald, stated in his annual report, according to the *British Medical Journal* (Feb. 24, 1917), that while insanity was nearly equally divided between the sexes, the greater frequency of general paralysis and alcoholic insanity in men was balanced by the greater number of women who suffered from melancholia or broke down at the climacteric period.

The definitely ascertained cause of delusional insanity in twelve men and five women was alcoholism, the largest number reported for ten years, and the highest percentage on the admission rate for that period. He had been informed that the admissions into one of the district asylums in Glasgow in 1916 showed that alcohol was the cause of the illness in 5 per cent more than in the previous year.

In the United States there is a distinct difference between men and women in the amount of insanity. The alcoholic insanity in men instead of being counterbalanced by special causes of insanity in women, as indicated by Dr. Oswald in Scotland, is apparently one cause of the difference. The United States census report for 1910 shows that when the number of cases of alcoholic insanity and general paralysis are excluded from the reports of both men and women "the (actual) numerical difference between the sexes largely disappears, though males are still somewhat more numerous than females, as is also the case in the general population."

The proportion of all cases of insanity per 100,000 admitted to insane hospitals in 1910 was 72.1 for men, 59.7 for women. But when alcoholic insanity and general paralysis were dropped out, the rates were 54.4 for men, 55.6 for women, indicating that in this country at least the women do not offset the men's insanity due to alcohol and syphilis by insanities special to themselves.

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PATENT MEDICINES AGAIN

THE question of the patent medicines containing alcohol is coming into prominence again with the prohibition of the sale of the straight alcoholic drinks. *The Journal of the American Medical Association* (March 10, 1917) relating one instance where a certain brand of "bitters" had served intoxication purposes comments, "Far be it from *The Journal of the American Medical Association* to deprecate the spread of prohibition. So long, however, as individuals can sell, unrestrictedly, preparations containing small amounts of plant extractives in alcohol one-half the strength of raw whisky under the guise of 'tonics,' prohibition will not have the terrors for certain persons it might otherwise possess. In view of the new 'bone-dry' law re-

cently enacted it would seem that now is a good time for the Internal Revenue Department to turn its attention to a class of remedies that might bring to the government considerable revenue—the alcoholic ‘patent medicines.’”

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PUBLIC HEALTH AUTHORITIES ON ALCOHOLISM

WHEN, in accordance with that first principle of liberty which demands opportunity for the maximum self-indulgence compatible with the good of others, one says, “Let everyone do as he pleases,” some think that the matter of the free use of alcoholics is included. So it is, with the following provisos:

First. In accordance with that principle of civilized and democratic government which compulsorily requires the general education of all citizens both for the protection of the community and the individual’s welfare, it is necessary that all should be instructed as to the effects of alcohol upon the body.

Second. When, despite education and established law governing individual behavior, the free use of alcohol leads a person to violate the established rules of the community (just as for a physician treating a sick person), to ascertain and remove the cause. If the cause in a given instance be alcohol, it seems that it is just as proper to keep this away from that individual as to take a revolver from another, proven not to be trusted with its possession.

It is under these principles that all proper anti-alcohol activity by public authorities falls.—*School Health News*, New York City Health Department, New York City.

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ALCOHOL AND WAR

AMONG vital questions to which the war has drawn attention, few are more important than that of alcohol, says the *New York Medical Record* (March 10, 1917). It appears to be more universally realized than ever before that alcohol is not only unnecessary but in the majority of instances distinctly harmful. That it is now believed by scientific men to be inimical to efficiency, bodily and mental, is shown by the fact that it has been practically abolished in Russia, and in France and Great Britain its use has been greatly restricted.

So far as Russia is concerned, if credence can be given to all accounts, the abolition of spirit drinking among the peasant population has been followed by remarkable results. The country inhabitants are stated to be healthier, more prosperous and in every respect more efficient.

It is in Great Britain, however, that the attitude toward alcohol since the beginning of the war has, perhaps, the most indicative of the change of views in this direction. The British are very conservative, most opposed to

alterations in their ordinary mode of living, and up to a few months ago have somewhat strongly resented radical restriction of the drink traffic. Gradually it has been borne in on them, or at least on the thinking part of the population, that alcohol reduces mental and bodily efficiency, and renders them less able to cope successfully with the usual conditions, which they must face, and they have concluded that, if Great Britain is to continue to hold her place among the nations of the world, anything which impairs the efficiency of the individual must be put away without hesitation.

Now there are numerous and influential men in Great Britain who have declared themselves in favor of prohibition, recognizing as they say, that alcohol is a hindrance and a handicap to that state of efficiency which is absolutely required at the present time. The tendency of all civilized countries at the present time is toward restriction and even prohibition of alcohol.

In this country the movement against spirit drinking is daily gaining momentum, and national prohibition appears almost within the range of practical politics. Two-thirds of Canada, so far as population is concerned, have decided in favor of prohibition, while viewed from the standpoint of area in four-fifths of the Dominion the sale of alcohol is banned.

Scientific opinion, on the whole, is against the social use of alcohol. It is not a food, and its fuel value has been probably over-estimated. To some extent it is a medicine, but not nearly to the extent it was once believed to be.

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ALCOHOL AND HUMAN EFFICIENCY

THE able series of articles in the *Atlantic Monthly* by Dr. Eugene Lyman Fisk on some scientific aspects of alcohol closed in the February (1917) number with the article on "Alcohol and Human Efficiency." Dr. Fisk has done the average reader real service in his account of the Carnegie Nutrition Laboratory experiments. He has freed the statement of results from as much of the technicalities as possible, showing the various tests by which "alcohol is uniformly found to be a depressant," and that this alcoholic depression is not, like sleep, a process of conservation. Certain striking paragraphs by Dr. Fisk follow:

If alcohol is the key that unlocks the door to the chamber of disease, degeneration and life-failure, we must hold it solely responsible for the results that follow its use. The only safe course is not to use the key. Some individuals may enter the chamber for a little while and escape without noticeable injury; but given two million supposedly sound, healthy men, and let them one after another enter that door, and there can be no reasonable doubt of the result. Many will come out smitten as from the war zone; many will not come out at all. Given two million men of the same type, who pass by the door and do not use the key, and, considering the exactly measured evidence from so many sources, as well as the evidence of common observation, who can question that at the end of 25 years, the first group will be decimated as compared to the second? If the life-insurance statistics showed any other result, they would be inconsistent. Whether the total effect is directly due to indulgence strictly maintained within the limit of so-called moderation is a purely academic question.

The contention that there is an inborn social craving for alcohol is pure dogma. Man craves enjoyment, relaxation, change. He seeks to anticipate good fortune and to quiet the activity of those conservative faculties which cause him to worry over trouble and life-struggle. He finds that alcohol apparently assists him in attaining these ends, and he drinks it for these effects, not because he is "thirsty" or "craves" alcohol qua alcohol, without any previous knowledge of its effects. Many individuals who are wrecked by alcohol would lead normal lives undisturbed by any "craving" for it if they were protected from the repeated experience of its effects.

After twenty-five years of experience in the close personal observation and physical examination of all types of men, from laborers to statesmen and leaders of scientific thought, and in the sifting and weighing of evidence relating to the influences that affect longevity as revealed by the experience on large masses of men, my cumulative judgment is that alcohol is a destructive force, wholly evil in its total effects. I deprecate the too prevalent tendency to apologize for alcohol, to deal gently and tenderly with it, instead of bringing it to the bar of human judgment to answer for its misdemeanors and justify its right to be exposed for sale on the street corners as a beverage harmless for the average man.

The unbiased mind must accept the implications flowing from the impartial business investigations of the life insurance companies, confirmed by the equally impartial labors of the laboratory. Can it be questioned that alcohol is one of the forms of poison which, among other factors, is responsible for the gradual bodily impairment and decay which we unthinkingly ascribe to time, and that it consistently imposes a burden of poverty, disease and insanity, and crime, which, regardless of debate as to its exact mathematical degree, not only warrants, but demands, energetic action for its control as a social evil?

As to its effect on progeny, the degree of this effect in man is debatable, but there is positive proof of an extremely adverse influence on the germ plasm of animals, as shown by Stockard. Until the degree of this influence in man is determined, which should properly receive the benefit of the doubt—alcohol or the baby?

Alcohol is alcohol, either in whisky or beer. It is nonsense to claim that beer is a hygienic drink. It is drunk chiefly for its alcoholic effect, and if the alcoholic effect is produced, the danger of alcohol exists. Anyone who doubts that beer can produce a certain form of intoxication need only visit the saloon and watch the beer drinker in various stages of befuddlement or excitement. If beer does not intoxicate or produce any alcoholic effect, what becomes of the "racial craving for stimulants" which it is said to satisfy? Furthermore, heavy beer drinking, as in the case of brewery employees, adds the danger of excessive fluid intake, entirely apart from alcohol. The heavy mortality of brewery employees is sufficient evidence that beer, so far as its effect on masses of men is concerned, is not a hygienic drink.

* * *

BEER AND THE HIGH COST OF LIVING

THE question of bread versus beer is stirring publicists and vast numbers of British people as Britain wrestles with the food problems growing out of recent phases of the war.

Churches are stating that there is in England at present sufficient whisky to last six years, but not enough grain to last six months. It is claimed that millions of tons of shipping are used by brewers at a time when four of

every five loaves of bread needed by England have to be brought to England in ships.

The question is asked by the churches, and placarded throughout England, whether it is sane to permit the liquor interests to take six thousand miners and thirty-five thousand tons of coal per week to carry on the manufacture of beer, when to meet what is claimed to be a grave shortage of coal eleven thousand miners have had to be withdrawn from the trenches in France? Shipping interests of England have joined the churches in saying, also in placards and in whole pages of advertising in the newspapers, that if ship building is to go on, and losses by war be made good, prohibition of the liquor traffic must come at once.

The government has reduced the quantity of beer to be brewed beginning the first of April to 70 per cent of the output of the preceding year. There is to be a corresponding restriction in the release of wine spirits in bond. This means a reduction to one-half of that of the year preceding the war, when 36,000,000 standard barrels were brewed. The new order reduces the amount for the coming year to 18,200,000 barrels. A later order reduced the amount to 10,000,000 barrels.

The object is, first, the saving of food material—barley and sugar.

There will be a saving in transportation facilities, a reduction in the amount of labor and fuel now required in making beer. There will be set free for the farmers who produce meat and milk, the 50 per cent of flour which the barley yields when milled and which is directly suitable for human food, and in addition the 40 per cent of the barley product, known in England as millers' offals, which can be used by animals. The brewer releases for feeding purposes only 25 per cent. Thus, from every point of view, entirely aside from the question of alcohol, the order will be advantageous for Great Britain. The statistics are those of the food controller.

There is poignant disappointment, however, among thousands of loyal Britons that Mr. Lloyd George as the head of the government has failed to take more radical measures. The London *Spectator* (Mar. 3, 1917) voices this disappointment in reviewing the Prime Minister's speech of February 23:

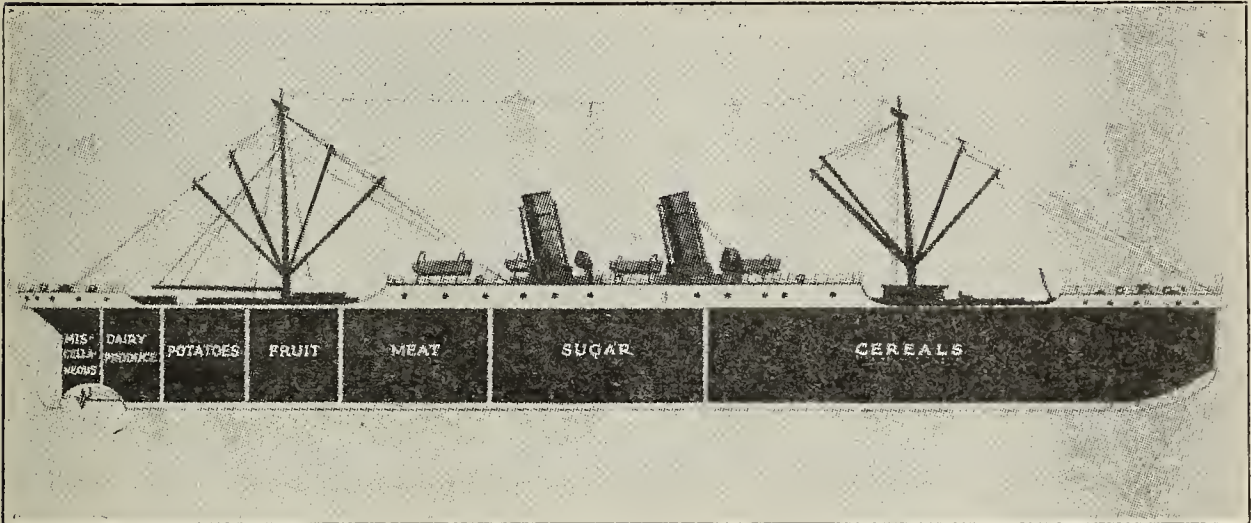
He warned the House of Commons in language which has never before been heard within its walls as to the **terrible danger** in which we stand.

He told them that the supplies of food in this country had never been so low. He insisted upon the risks to which the supplies from overseas are exposed, and he made the whole House feel the imminence of our peril.

So far the Prime Minister did his duty. But then came failure plain and palpable. Instead of saying that faced with such a situation he would not, as long as he was responsible for the government of the country, allow one single grain of our food supplies to be diverted to any other use but that of feeding the people, he actually told the House that he intended to allow the brewers to use foodstuffs for the manufacture of ten million barrels of beer in the coming year, the year of peril—a quantity which by his own calculation would feed the country for close on a month and a half. He prided himself on saving a month's supply of food for the country by cutting off eight million barrels from the brewers, but, amazing as it sounds, he did not seem to see that the more credit he took for this, the more intolerable was the fact that in circumstances so grave he still left the raw material of ten million barrels to be de-

stroyed in the brewers' vats. Has he never heard of the text: "These ought ye to have done, and not to leave the other undone?"

The Prime Minister had the greatest opportunity that has ever come to a statesman, living or dead. He missed it, and he missed it, not because his eyes were blinded, not because he did not know what he ought to do, but because he was afraid. Just what he was afraid of we cannot say; but something held him back. We hear a great deal just now about the "Hidden Hand"—a mysterious undiscovered power which nobody sees, but which when stretched out is omnipotent. Some "Hidden Hand" held Mr. Lloyd George in a grip of iron.



AN IMAGINARY SHIP SHOWING BRITAIN'S SHIP-BORNE FOOD SUPPLY IN ITS VARIOUS PROPORTIONS

If we imagine one ship bringing all the foreign food which this country requires from day to day instead of many ships bringing whole cargoes of particular articles, we get a ship proportioned as above. The cereals in this symbolical vessel occupy the largest space (from the bow to the first funnel), 42.5 per cent. Then comes sugar, a goodly bulk, 18.2 per cent; followed by meat, poultry, and eggs, 13.5 per cent. These are the three largest divisions. In the stern part of the hold we have fruit, 10.2 per cent; followed by potatoes, which occupy 7.5 per cent of the hold; dairy produce, 5.7 per cent; and miscellaneous. The largest sections are towards the bow, the smaller are shown towards the stern.—From Illustrated News.

Various explanations are offered, *The Spectator* says, of what is this "Hidden Hand" which stays the Prime Minister in the radical action against alcohol with which he is known personally to be in sympathy. All of them have an opportunist basis. One is that when Mr. Lloyd George formed his ministry, he made certain agreements with the Labor party, one of which was that there was to be no war-time prohibition of intoxicants. The second similar suggestion is that some of his colleagues, knowing his views, before agreeing to serve with him, obtained a promise that he would not introduce a prohibition measure. The third suggestion offered is that as a majority of the House of Commons themselves use intoxicants, they "would not support any government scheme for 'down glasses.'" Finally, is the suggestion that the liquor trade itself which has strong influence with the Irish party, a section of the Labor party, and a considerable portion of both the Liberal and Unionist parties, has declared that "if it comes to a fight it will prevent prohibition from being carried, force a general election and run pro-liquor candidates."

"Which, if any of these four causes is operating," says *The Spectator*, we are utterly at a loss to say. None of them seems to us adequate or likely. All we know is that something is holding back the Prime Minister

from doing the thing which his words definitely point to as right, i. e. stopping the waste of food products."

The Spectator believes that if Mr. Lloyd George had made the supreme appeal to the nation, he would have won the cause.

The very fact that he was asking for a great sacrifice would have helped, not hindered him, for in the last resort it is the obligation of duty which appeals to Englishmen of every class. They are stubborn enough till the call for duty comes, and then every other consideration goes to the winds.

And so the Prime Minister missed his opportunity. The nation is not following where we cannot but believe he would fain have them go only because he did not dare to lead.

If it is impossible for so well informed an observer of public affairs in Great Britain as *The Spectator* to decide what is holding back the government from more aggressive measures against liquor, it would be presumptuous for Americans to attempt to do it. It is probable that with the enormous burdens of various kinds that are resting upon the British government, it is endeavoring to deal with the whole situation in the way that seems likely to hold the cooperation of the largest numbers of the British people.

Meanwhile, the United States is in no position to cast reflections upon the British government for inactivity in this matter. According to the *Weekly Bulletin* New York City alone produces 8,000,000 barrels of beer annually, equivalent to almost half of the amount to be allowed for the whole of Great Britain this coming year.

"Judged by the calculations made by the British experts," says the *Bulletin*, "this represents 127,000 tons of barley, 16,000 tons of sugar and 7,300 tons of grits—nearly all wasted.

"Does anyone seriously deny that the time has come when this enormous waste shall be curtailed?

"‘More bread and less beer.’ This is the cry of all reasonable people."

* * *

NATIONAL FRIEND OR ENEMY

THE proposal of the French government to forbid by decrees the consumption of distilled liquors during the war has provoked lively agitation throughout the country, according to *Feuille d'Avis de Lausanne*, (Feb. 15, 1917). One liquor trade journal went so far as to accuse the Anti-Alcohol party of having sold out to the Germans and covertly threatened the government with a revolution.

In a long article entitled "Alcohol and National Defense," *Le Figaro* (Paris, Feb. 15, 1917), quotes the president of the Council as asking for power to deal by decree with all questions concerned with national defense for which legislation is too slow a process, "especially, a serious question which can only be adjusted in war time, the solution of which is important to national life and welfare: the total suppression of the consumption of alcohol." *Le Figaro* comments rather cynically on the inactivity of the gov-

ernment in pushing forward the vigorous measures against alcohol indicated as necessary some months ago and also their parliamentary friends in defense of the trade. It explains in some detail the scientific uses of alcohol in making munitions for national defense and concludes, "alcohol is at the same time one of the best aids to national defense—in the powder mills—and one of its most cruel enemies—in the stomachs of the workmen in the war industrial establishments. Who, then, would dare hesitate to choose between these uses?"

* * *

FRENCH EMPLOYERS START INDUSTRIAL WORK AGAINST DRINK

A RECENT meeting of the association of employers of manual labor in the ports of France decided, according to *Le Petit Journal*, (Paris, Feb. 12, 1917), to start in industrial centers an effective organization to work against alcoholism.

At a meeting of the directors a few days before, says *Le Journal des Debats* (Feb. 12, 1917), nearly the whole session was spent in discussing the alcohol question, which is a matter of increasing urgency in commercial ports. Resolutions passed by influential business organizations in other cities showed that in the port cities where the consumption of alcohol is heaviest, everybody intelligently concerned for good industrial organization was agreed in demanding immediate and effective repressive measures. The directors decided to start the organization to fight alcohol in industrial centers, as protests addressed to the authorities were usually fruitless.

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QUEBEC BISHOPS AGAINST BEER

THE proposition in Canada to exempt beers of 5 per cent alcoholic strength from the operation of the prohibition laws brought out strong protest from Catholic bishops of Quebec who speak from a practical knowledge of the general and universal objections to making an exception in favor of beer. The statements are from the address by Dr. Gauvneau of Montreal, from which extracts relating to wine have already been published in the JOURNAL. The translation is from *La Temperance*, December, 1916.

The Bishop of Three Rivers said concerning the beer proposition:

"Five per cent by volume, or 10 per cent proof, is quite enough to intoxicate a little while, especially when, by a falsification easy to foresee, they increase the amount. For my part, I consider this project of a nature to vitiate all our strong popular prohibition measures. What we need is the suppression of the sale and the manufacture of alcoholic liquors except for scientific and religious purposes. The vigor of our race, already so seriously compromised, the order and peace of our families, the most vital interests of

our society and of our spiritual welfare, all demand this radical remedy, seeing that all partial and palliative means have been tried in vain."

The Bishop of Saint Hyacinthe wrote: "The campaign which is being waged for the amendment of the license law so as to declare beer which would not contain more than 5 per cent by volume a non-alcoholic liquor ought in my opinion to be defeated. The use of beer would permit alcohol to continue its ravages among our people. This would be a sorry defeat for our crusade of years. Our people would drink beer in larger quantities for its alcoholic effect and drunkenness would continue to produce its lamentable crimes."

The Bishop of Chicoutimi wrote: "Who does not see that such a measure would be a very serious blow to the temperance edifice which we have built with so much labor during the last few years? What is important to know is not whether beer is or is not an alcoholic liquor, but whether it will intoxicate or alcoholize. To ask that question is to answer it. They would permit, they tell me, 5 per cent of alcohol by volume, which the experts say is about 10 per cent proof. The present law calls alcoholic all drinks containing $2\frac{1}{2}$ per cent proof alcohol. We would have, therefore, in beer a strongly alcoholized beverage, which under cover of the law would go everywhere; with which one could, without doubt, become intoxicated, and could become alcoholized quickly and certainly, though consuming without disquietude—and without measure—quantities of this drink officially declared harmless. This is to be done in expectation that the people would become alcoholic or intoxicated a little later with the other alcoholic liquors, for which the manufacturer of spirits will not be slow in obtaining the same privilege as that for beer. And always under cover of a prohibition law the only practical effect of which henceforth would be to promote intemperance by approving the sale of alcohol under certain forms. We must absolutely oppose this breach of the prohibition law because it would be for us on the eve of a definite victory the beginning of defeat."

The Archbishop of Seleucie said: "My arguments against beer are not at all personal. They are those of all clear-sighted persons who are not blinded by prejudice, interest or passion. Beer causes us incalculable evil. It awakens little mistrust, it costs very little, it is kept in the public eye, like bread and meat, along all the country roads, thus making temptation pass and repass at all gates.

"The number of dozens (of bottles) that have been thus bought and drunk in all our parishes is formidable. In this way the use of beer has contributed in a very great degree to spreading the taste for drink and the appetite for alcohol.

"And because of all this, women and children have been the chosen victims of beer. This is perhaps its greatest crime, that it has caused the contracting of the alcohol habit by persons who were shielded from the temptations offered by distilled spirits.

"Prohibition not extended to beer would be a sinister comedy. In the

first place beer would open the way to all other drinks and make the enforcement of the prohibition law very difficult. And afterwards, supposing that distilled liquors disappear, beer would be sold freely everywhere. Given the habits of our people, if the day comes when, protected by law, they can procure beer, we shall witness frightful drunkenness, and there will be a state of things a hundred times worse than what we shall have sought to destroy.

"In short, I believe that if a law is passed declaring that beer containing not over 5 per cent of alcohol is not an alcoholic liquor, all our work is lost, the cause of temperance is vanquished and alcohol will triumph all along the line."

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THE COLLEGE ATHLETE AND DRINK

HOW the new college athlete is turning some of his energy toward cleaning up drinking and other unsportsmanlike practices that go with it is graphically told by Lewis C. Reimann in *The Intercollegiate Statesman* (February, 1917).

The author was star left tackle on two of the best football teams of Michigan University, picked for membership on a 1914 All-American team, honor student, elected to the highest university honor societies, president of the largest college Y. M. C. A. in the United States, worked his way for five years through the university, and headed up a "clean athletics" movement by and among the athletes in a university of 6,000 students.

The group of men which he gathered as leaders took as the slogan, "This is not a sissy matter but one of common sense. We can't have a winning track team if these drinking orgies after victories are permitted."

After a hot discussion, a mass meeting of the athletes passed resolutions discouraging celebration of victories by intoxicants or any form of excess, and declaring that any offender should be punished. Betting on intercollegiable games, profanity in the athletic house and field, and the passing out of tobacco at football smokers were also to be discouraged.

The annual smoking parties of the local honorary societies of the university which were not considered a success unless every member was so drunk that he had to be helped to walk were broken up by revolt incited by Reimann and other men, who agreed to refuse to pay the assessment for drink.

At the University of Pennsylvania last year for the first time all four undergraduate classes held banquets without drink.

Every man on the Pennsylvania wrestling team for two years has signed an agreement not to drink or smoke while in training. The captain "doesn't want any weaklings in his team for they are likely to blow up in time of stress."

Mr. Reimann has some pertinent paragraphs for present or coming athletes:

At the Middle Western Student Conference a year ago last June, seven hundred picked students of the middle western colleges and universities went on record as being opposed to all forms of drinking by members of the team and student body.

This is what I mean by the new athlete—the man who takes a positive stand against practices that lower the standard and morals of the student body.

If liquor is to be wiped out of any school, the student body itself must do the job. The dynamo must come from us.

The day of the bottle-scarred hero is gone. The first question the student body asks of a football hero is, "Does he drink?"

The best coaches and trainers in this country absolutely forbid drinking of intoxicants during the training season and keep a watchful eye on their men the year round. The first infraction of a rule is dealt with harshly by coach and athletic directors. The second generally means unqualified dismissal from the squad.

Coach "Hurry-up" Yost says he has no time to waste trying to train a drinker, and nothing tries a man's staying powers like football.

Sporting editors insist that it is no longer necessary to make rules against drinking and carousing, for the men realize that they will soon drop out of the game if they follow this pathway.

College and professional athletes not only refrain from drink, but are leading the fight against it. In the Ohio [prohibition] campaign over 600 students enlisted, and some of her foremost athletes stumped the state.

This past spring nearly 1,000 Michigan students signed for service in that state-wide fight. In some colleges entire athletic teams have offered their services.

The whole athletic world, as the industrial and professional world has already done, is taking up the sword. Some wonderful athletic records have been set in the past, and men with nerves unsteadied and systems devitalized by alcohol can never hope to break them.

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SPOILED POSSIBILITIES

WILFRED LAY has expressed in *The Bookman* (March, 1917) an idea that must have been vaguely in the mind of many readers of London's productions, but it remained for a psychonanalyst to give it clear expression.

Something happened to London's development, Mr. Lay believes, that prevented him from becoming "a great cultural writer."

"It was not lack of power; for that he really had, though it was exercised on a level all too low." It appears to the analyst as rather a checked development toward spiritual adulthood, and the time when it occurred is also pointed out.

As a boy, says Mr. Lay, Jack London appears to have been more grown up than he was as a man. As a boy he showed adult traits of adaptation to environment. "But suddenly, just as he was beginning to be a wage-earner and thus an integral part of the mechanism of society," he had his drinking bout with "Scotty" and the harpooner, and then thinking "that he was becoming a man by throwing off those (family) relations which are the most higher organized of all relations," he burst "out into the narrow world of the sea," "where the spiritual life is the narrowest and where the completed life of humanity is impossible." "Thus Jack London missed spiritual development" and exercised his really great power "on a level all too low."

Whether it was the effect of alcohol or the effect of the environment into which drink brought him, Mr. Lay does not undertake to decide. He evidently thinks environment had much to do with it, for he says had London stayed on land and received a social education, he might have become a great social writer.

But merely remaining on land would not have insured a more rounded development for "the man who is unduly impressed with the revelations of man's character which he gets in saloons, and which is revealed only in the 'white-light' of alcohol in the saloon or in the house, is developed only on one side of his character."

Thus on the whole Mr. Lay's psychoanalysis of "John Barleycorn" emphasises still further the idea most of us have gained from the book, that not Jack London alone but the reading world suffered an actual loss in the damaging effect drink had upon his really great genius.

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ARTICLES IN RECENT MAGAZINES DEALING WHOLLY OR PARTLY WITH ALCOHOL

The Survey, January 13, 27, February 10, 24, March 10, 1917, *Turning Off the Spigot*. A valuable series of articles by Elizabeth Tilton. Mrs. Tilton has brought together in compact, useful form many historical and current facts from several countries showing that logic and experience warrant the expectation that the best results in dealing with the alcohol question come through education, personal abstinence and complete prohibition.

The Nineteenth Century, February, 1917, *The Liquor Traffic in War*. By Dr. Arthur Shadwell. A review, favorable in tone, to the work of the Board of Control in dealing with public houses in Great Britain. Beside it, perhaps, should be placed the criticisms of many experienced English and Scotch temperance experts who believe that such favorable results as appear are over-balanced by the course of the Board of Control in establishing state public houses with special attractions.

McClure's Magazine, April, 1917, *How to Have Better Children*. By Cleveland Moffatt. Contains a warning to women that the drinking man may be unable physically to be the father of sound children.

The Ladies' Home Journal, February, 1917, *I Was a Drunkard in Every Sense*. By a Physician. The writer began to drink, not through any inherited weakness, but in the home, and through the example of a much-honored elder. He hits hard blows at over-emphasis of the idea that ordinary alcoholism is of itself a disease, claiming that this theory both weakens the moral fiber of the drinker and discourages him if he considers trying to stop drinking. He admits, of course, that drinking causes diseased conditions which in time may perpetuate addiction to alcohol.

The Bookman, March, 1917, *John Barleycorn Under Psychoanalysis*. By Wilfred Lay. A study of Jack London, what he was and what he missed

being in the light of John Barleycorn and other books. For fuller mention see page 162.

The Spectator, March 3, 1917, *What Might Have Been*, and other notes on the present alcohol situation in Great Britain. See also page 157.

Intercollegiate Statesman, February, 1917, *The College Athlete and Drink*. By Lewis C. Reimann. A fine presentation of the changing ideals of college men in the matter of drink.

The Century, March, 1917, *Should We Fight for Prohibition?* By Albert Jay Nock. Advocates the Norwegian system of dealing with the liquor question. Attributes Norwegian sobriety to the encouragement of light alcoholic liquors. The article quite disregards the influence of education, the temperance propaganda and local prohibition.

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CURRENT COMMENT

THE province of Quebec has passed a new law this winter reducing the number of legal retail liquor licenses to be granted in Montreal, Quebec and other license cities of the province.

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THE committee on legal affairs of the Massachusetts Legislature reported against the passage of a bill designed to reduce the number of licenses throughout the state and especially to give Boston the relief needed indicated in the report of the Boston Children's Aid Society (page 149).

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As soon as the people know the truth about alcohol, popular sentiment will crystallize into national constitutional law, which, cooperating with the exercise of the police powers of the states, will destroy the traffic. The permanency and stability of such law will depend largely upon the education of the citizens of the republic.—Andrew Wilson, Ph.D., D. C. L. in *Jurisprudence of the Alcohol Problem*.

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THE Gothenburg system is not woven of the stuff that has helped most to bring about the low consumption of Sweden and Norway, namely militant abstinence that says "no" to the custom, and prohibition that says "no" to the traffic.—Elizabeth Tilton in *The Survey*.

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THE Boston Elevated Railway Company has taken still further action in requiring temperance among its employees and among its officials as well. In a general order recently posted in all car-houses, shops and other departments, and put in the hands of everybody connected with the service, President Brush says:

To All Officials and Employees:

The use of intoxicating liquor by officials or employees, whether to excess or not, and whether on or off duty, in such a way as, taking the nature of their duties into account, may impair their efficiency or render doubtful their fitness of the responsibilities involved in their employment, shall be sufficient cause for their discharge.

WE are not trying by legislation to make men good. We are working to put out of their way an agency which makes it possible for them to be one hundred times as bad as they are or have any inclination to be.

If the nation interferes with food that has deleterious ingredients, why has it not the right to interfere with injurious alcoholic liquor?—Robert A. Woods before the Boston Twentieth Century Club, March 18, 1917.

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THE economic advantages of sobriety have never been doubtful. Nobody knows them so well as the workingman and his family. If he is to break with drink other appeals must be made.

It is for the employer to find these appeals. He must do it. Drink interferes with every item on the program on which he has set his heart. A drinking man makes stability out of the question. He is a barrier to efficiency. He is an enemy to safety. Drink must go.

"I don't believe we shall get worth while results (in safety)" said the secretary of the New York Workmen's Compensation Bureau to the National Safety Council, "unless we place our mark of disapproval on the liquor question immediately."—Ida M. Tarbell in *New Ideals in Business*.

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DOCTORS should become total abstainers. Their wives should have the courage to bar alcohol from their tables. We all know that drinking hasn't a leg to stand on, yet doctors do not always set a good example.—Dr. Haven Emerson, Health Commissioner, New York City.

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It was not long ago at Dover that the Admiral in command informed the magistrates that a publican who had sold whisky to a sailor might have been "the direct cause of the loss of lives of many of our countrymen." Another case appears in the newspapers on the day this book is being written—on New Year's day, 1917. The captain of a large British ship was put in irons by his crew, kept a prisoner in his cabin, and fed through a porthole; and the charge that was brought against him on the word of nine witnesses for the Admiralty was that the captain was often dangerously drunk, and that on December 8, 1916, under the influence of drink, he sighted a British hospital ship and ordered the chief gunner to fire on it. On being reminded that the ship was our own hospital ship, the captain replied that he did not care, and repeated the order, which the gunner refused to obey. . . . Are we honorable men and an honorable nation, while we send our hospital ships to sea and allow this private trade to send to sea the stuff that would turn our guns on them? We say what we say of the German submarines that sink our hospital ships, but what shall we say of this alcohol that threatens them?—Arthur Mee in *Defeat or Victory*.

BOOKS AND PAMPHLETS

A LAYMAN'S HANDBOOK OF MEDICINE

By RICHARD C. CABOT, M.D., *Boston, Houghton, Mifflin Co.* \$2.00. *By mail of the Scientific Temperance Journal, Boston, Mass., \$2.15.*

HE old-time household book of medicine consisted chiefly of recommendations of drugs and handy devices for the treatment of disease. The LAYMAN'S HANDBOOK offers the new and healthy viewpoint toward the ills which flesh is heir to, or has acquired, of understanding and dealing intelligently with actual disease and of dismissing from mind details which are non-essential but which may become a source of genuine aggravation if mentally dwelt upon. Dr. Cabot is master of a style that catches and holds attention and in this volume has made a purposeful and successful effort to so state the present knowledge concerning various forms of physical disability that the reader finds himself reading on, responding to it as to the lure of a popular essay.

It is thus a readable and helpful presentation of many of the modern medical facts which if more widely known would tend both to increase the intelligent practice of personal hygiene and the taking of precautions at the first signs of disorder which might materially decrease morbidity and premature mortality.

Dr. Cabot holds emphatically the point of view that alcohol is never a stimulant, but always a narcotic. He believes that chronic alcoholism is frequently the expression of some antecedent defect. The so-called natural physical craving for liquor he believes does not exist, but that what does exist is "a general sense that a man needs something or other to fill up a vacancy, but this is not chiefly a physical vacancy. I think it is the same sort of thing that makes the American people chew gum—they want to be doing something; they are not sufficiently interested in life without abnormal activity."

In line with this point of view is the treatment of alcoholism which Dr. Cabot believes is most successful if a new interest stronger than the motive which originally led to drink can be found in which activity can be enlisted—the old story of "the expulsive power of a new affection." Change of work, the finding of a real friend who cares, a religious motive may all help. Treatment which clears the system of the poisons that the alcoholic addiction has engendered helps largely by putting the patient "in such a condition of mind and body that he really can be appealed to by his own best self or the personality of someone outside."

"Degenerates, prostitutes, or criminals who turn up in prison or in the slums with these habits, are not to be helped much by any cure. They have no sound stamina of character and no interest to hold them after they have been cured."

In relation of alcohol to disease Dr. Cabot holds that in pneumonia of alcoholics about 75 per cent die as against a general average death-rate of 25 per cent. "This is one of the best established examples of the harm alcohol does in people whom it does not make drunk. A man who is never drunk at all, but is chronically alcoholic, when he gets pneumonia is three times as apt to die as the total abstainer."

"Gastritis is today a term practically confined to alcoholics. It is an occasional result of alcoholism. Not all alcoholics have gastritis, but some of them do."

"Liver cirrhosis" is described as "a hardening and contraction of the liver due to millions of scars, those scars themselves due to irritation, probably from alcohol plus x. Almost every patient that has it is alcoholic. Probably there is some unknown factor that combines with alcohol, causes that inflammation and produces scars which harden and contract the liver. Next to changes in the mind, cirrhosis of the liver is the most important evil result of alcohol, for it is an invariably fatal though rather slowly fatal disease.

"In this as in many other long-standing disease, the patient often becomes weaker and weaker, then catches some acute infection, such as tuberculosis or pneumonia, and cannot withstand it. He usually dies of what we call a 'terminal infection,' a swarming in of bacilli which he ordinarily would resist, but which in his weakened condition he cannot. This disease probably last many years, but we ordinarily do not know of it until within the last year or two of life."

* * *

THE PREVENTION OF DISEASE

By KENELM WINSLOW, B.A.S., M.D. *Philadelphia and London: W. B. Saunders Co., 1916. Cloth, \$1.75, net; by mail of The Scientific Temperance Journal, Boston, Mass., \$1.85.*

IN these days when everyone is coming to know that freedom from disease is largely a question of right living, "THE PREVENTION OF DISEASE" by Kenelm Winslow, a popular treatise on keeping well, is a book that meets a popular need. It deals with the every-day matters of personal hygiene—foods and drinks, their values and principles of selection and preparation; exercise, clothing, bathing; germ diseases; local troubles that cause general diseases, such as mouth infection, rheumatism, sexual hygiene; the diseases of childhood, of middle life, disorders of nutrition, nervous and mental diseases; food poisoning, the prevention of deformities, and the care of wounds—all from the standpoint of prevention.

The discussion of alcoholic drinks merits some adverse criticism, not so much in the statement of basal principles as in unguarded passages. Thus the author puts himself quite in accord with the present knowledge of the action of alcohol when he says that "We now know that instead of being a stimulant, it is a powerful depressant, or narcotic," but he recommends it in faintness, after emotional and nervous shocks and after accidents and speaks of its stimulating effect upon the stomach. In another paragraph he explains that the stimulant action in the stomach is due to the irritation it produces there and that this reflexly stimulates the heart. It would have made the book safer for the general public, steeped as it is in the over-valuation of alcohol and the old idea that it is a true stimulant, if he had stated clearly that the wine, of which he is speaking, produces an appearance of stimulation through an irritating effect upon the stomach.

The recommendation of whisky or brandy for the layman to use in emergencies is still less excusable, implying as it does, their places on the medicine shelf in the home, a constant temptation to children, servants or visitors, if not to the heads of the house themselves. Even if it is "one of the best" means to use for the purposes he names, which many successful physicians dispute. It would have been far better to name for the public for whom the book is intended the other things which could be easily substituted and which would not carry the temptation that alcoholic liquors offer.

This course would be entirely consistent with the author's opinion expressed elsewhere that the intrinsic harmfulness of alcohol is so great that it may well be called a poison; that its continuous use as a beverage must be condemned from the food viewpoint because it destroys the vital organs, produces chronic inflammation of the stomach, and tends towards dullness and lessened capacity for muscular or mental work, and results in a vicious habit.

He does not place undue emphasis on the fact that some individuals may take large quantities for years without inducing perceptible deterioration of their vital organs, and does emphasize the enormous number of persons who are wrecked by alcohol. The ordinary person does not realize this because he has no means of appreciating the true significance of drink, but the physician at a large hospital sees the innumerable patients with delirium tremens, and "the insane asylum is a splendid place to view the results of alcohol in the subject or his progeny."

That these sights have, as the author says, "a most impressive influence upon the least thoughtful," is the reason why those who do see them and so do have an oppor-

tunity to appreciate the enormous number that alcohol destroys, should practice "safety first" in their teaching on the subject. This does not mean that they should exaggerate or misrepresent or in any wise bend the truth. While stating it they should keep in mind both their appreciation of the harm alcohol does and the prevailing customs, traditions, beliefs and practices that need to be corrected in order to free mankind from the existing coercion and temptations that lead first to its occasional and moderate use and then to its habitual and immoderate use.

* * *

NEW IDEALS IN BUSINESS

By IDA M. TARBELL, *New York: The MacMillan Company.*

AS its title indicates, there is no "muck-raking" in this inspiring volume of what the business men of the United States are doing to make possible healthier, happier, richer lives for their employees, and this not in a spirit of patronage but as a matter both of simple justice and good business. These forces now at work which Miss Tarbell calls "The Golden Rule in Business" are relying both on science and that humanity that visions the always larger possibilities of mankind. Thus industry today, in spots only as yet, it is true, is dealing successfully and profitably with the problems involved in hygienic, attractive and safe working conditions, in enabling the workman to have a good home, with shorter hours of labor, more than a living wage, steady employment, with a chance for mental development with inducements for intelligently healthful and sober living.

This is no Utopia which Miss Tarbell describes. Nothing is related which she herself has not seen in successful operation. Principles are unquestionably being established that in time will revolutionize our present industrial system as now generally managed. Every employer or employer-to-be ought to read these pages.

The chapter "Sober First" is a splendid summary of the able, intelligent methods by which modern industry is attacking the liquor problem.

* * *

SCOTTISH TEMPERANCE ANNUAL FOR 1917

Edited by TOM HONEYMAN. Glasgow: Grand Lodge of Scotland, I. O. A. T., \$0.25.

AS usual, this volume of 250 closely printed pages affords a convenient book of reference for the current state of affairs on the alcohol question in Great Britain and especially in Scotland.

PAMPHLETS

Those starred () are of special interest on the alcohol and related questions.*

*JURISPRUDENCE OF THE ALCOHOL PROBLEM. By ANDREW WILSON, Ph.D., D.C.L., *Washington, D. C. Reprint from the Medical Times, March, 1916.*

*COMPENSATION. OUGHT THE STATE TO PAY DAMAGES TO THE OUTLAWED LIQUOR DEALERS? By SAMUEL WILSON, *Newark, N. J. The Anti-Saloon League of New Jersey.*

*FEDERAL AND STATE LAWS RELATING TO INTOXICATING LIQUORS. By WAYNE B. WHEELER, *Westerville, Ohio: The American Issue Publishing Co.*

The legal basis on which American legislative measures against the manufacture and sale of alcoholic beverages rest is carefully presented in the paper by Dr. Andrew Wilson. Covering in part the same ground in citing some of the same court decisions, Mr. Samuel Wilson specifically analyzes and replies to the various arguments advanced for compensation of the liquor traffic when it is prohibited. The difference in the situation in the United States where the liquor interest is not a "vested interest" as it is understood in England needs to be understood when, as is not infrequently the case, English precedents are cited for compensation in this country.

Mr. Wheeler has compiled a summary of the most important laws relating to the liquor traffic in the states and the United States up to June 1, 1916. The pamphlet con-

tains also valuable suggestions for a law enforcement program and for the machinery for making it effective. The author is the Attorney and General Counsel of the Anti-Saloon League of America.

*MENTAL STATUS OF RURAL SCHOOL CHILDREN. By E. H. MULLAN. *Reprint No. 377 from United States Public Health Reports.*

THE FEEBLE-MINDED IN THE SCHOOL POPULATION OF ARKANSAS. By WALTER L. TREADWAY. *Reprint No. 379 from United States Public Health Reports, November 24, 1916.*

*THE FEEBLE-MINDED, OR THE HUB TO OUR WHEEL OF VICE, CRIME AND PAUPERISM. *A study of feeble-mindedness in Cincinnati by the Juvenile Protective Association, 1915.*

*THE JUKES IN 1916. *Publication No. 240. Carnegie Institution of Washington, \$2.50. See page 124.*

The story of the Jukes summarized on another page from this detailed report issued by the Carnegie Institution of Washington is emphasized by other studies of the extent of feeble-mindedness.

The first two of these reports are based upon studies of school children in both rural and urban districts in an effort both to discover the extent to which defectiveness prevails among the people, and to ascertain what changes need to be made in school training to relieve the normal pupils of the drag of the feeble-minded or retarded children and also to make the suitable provisions for ensuring such training for these latter classes as should either give them the kind of training best fitted to their needs or, in the case of the merely retarded to enable them to "catch up" and go on to further education with their fellows.

Mr. Mullen's work reports a survey of the schools of New Castle county, Delaware, and of Porter county, Indiana. Among 3,793 children studied in Delaware, one-half of one per cent were found to be definitely feeble-minded. In addition, 1.3 per cent showed abnormalities to an extent that indicated that they were probably mental defectives. In the Indiana county, of 2,187 children examined, 1.8 per cent were so retarded that their mental development at no time will be greater than that of a child. "A defective heredity, insanity, alcoholism, and syphilis in one or both parents are considered responsible" says the report, "for most of the cases of mental defectives."

These children as children retard all school work, tend to drift into juvenile delinquents or later, in a large number of cases, into the classes of criminals, tramps, paupers and prostitutes.

The investigation in Arkansas reported by Mr. Treadway covered certain counties selected as typical of state conditions. In 51 rural schools in 13 counties, with 5,500 pupils the average percentage of feeble-mindedness detected was 0.7 per cent. Two and eight-tenths per cent were unable to profit by the usual course of study. Among 8,225 children in urban districts the percentage ranged from 0.37 to 0.9 per cent. No cases were included which were doubtful. Upon the basis of the 1910 census report the investigator estimated that not less than 2,200 of the white children between 6 and 14 years of age in Arkansas are definitely feeble-minded. The mortality rate is high due to ignorance of personal hygiene, irregular employment of parents, improvidence and bad housing. The figures of Atwood are quoted showing that among 200 feeble-minded children one-fifth responded positively to the Wasserman test for syphilis.

Institutional care and training is recommended for the feeble-minded children, special classes for the retarded pupils, many of whom, after being given individual attention, are able to go back to the regular classes.

The report of the Cincinnati Juvenile Protective Association, unlike either of the others, relates to a large city. Alcoholism crops out everywhere as certainly an attendant and accentuating condition. An illustration from this report appears on page 152.

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JULY, 1917



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VOLUME XXVI

THE TEMPERANCE OUTLOOK IN BRITAIN

By JOHN TURNER RAE,

Secretary of the National Temperance League, Great Britain

A GENERAL survey of the field of temperance enterprise in the Old Country discloses a remarkable variety of operation which at first sight might seem to indicate some lack of unity and cohesion, but when taken in detail presents a co-ordinated movement of much significance, the constituent agencies in which converge along their own particular lines towards the common objective of national sobriety.

Numerous proposals for amalgamation have been placed before some of the national temperance bodies from time to time; the present is prolific in general aspirations in that direction. But when the ground for such fusions have been explored it has usually been found that the more productive method of promoting the united aim is for each organization to proceed upon its own initiative.

Nevertheless there has been and is a great and growing spirit of mutual appreciation of the operations carried on by the various bodies, and when occasion demands, as in the case of the present necessity for bringing home to the nation the influence of alcohol in hindering efficiency and in preventing progress in the prosecution of the war, the co-ordination and solidarity of the movement are abundantly manifested.

It is only when diversity of opinion becomes acute upon proposals for the legislative or administrative control of the liquor traffic that there would appear to be a cleavage in the temperance ranks, as at present upon the question of "state purchase." But even those who may be seriously opposed to each other upon this and other modes of "management" actively co-operate in promoting the temperance movement PROPER.

In order to give its full significance to the final word in the preceding paragraph, it must be remembered that total abstinence is the root principle of the British temperance reform. Even the "dual basis" of some societies is a concession to the "weaker brethren" who do not like to be excluded, but desire to feel they are doing something, if it is only giving financial support, or taking a share in obtaining legislation which would affect the drinking of *other people*.

"Moral suasion," moreover, is recognized here as being the effective force behind legal action, law being perhaps more essentially the stereotyping of a popular practice, when it deals with national habits and customs, than it is in some more progressive states. Hence the long preparative period before the statute-book records even those moderate ancillary measures which may be called for by that portion of the public whose concern has been awakened by the drink menace.

There is a vast and diversified middle party in Britain which governs elections and secures acts of Parliament. It is significant that it is this influential class which has been induced, largely by the scientific temperance of the past 30 years, to change its modes and times of drinking, and in many cases to cease it altogether. The fighting of visible drunkenness, which was more particularly the objective in early days, has given place to an organized movement, "anti-alcohol."

It is this change in the ultimate objective which has more particularly roused the active opposition of vested interests, whether directly or indirectly represented in the liquor traffic, and has produced the virulence that characterizes the more recent developments of the attack upon the temperance reformer. So long as he confined his energies to reclaiming the drunkard, to training the young in habits of abstinence, or even endeavoring to suppress grocers' licenses, the trade was not particularly concerned at his progress.

But the growth of scientific evidence against alcohol has changed the venue of antagonism, and the trade endeavors to counter the influence of the temperance reformer by taking a leaf out of his book and quoting opinion in favor of beer, wines and spirits, and especially of "medicated wines," the medical profession even being not altogether averse from co-operation to some not insignificant degree. The psychology of both the liquor man and the ordinary medical practitioner is a truly marvelous factor in the immunity from a sense of responsibility which both appear to possess. Modern materia-medica renders it impossible for the profession, and the scientific manufacture of intoxicants impossible for the brewer, the wine-grower or the distiller to be ignorant that they are exploiting an ultimate poison disguised in a wide range of degrees of dilution.

Although the effects of this narcotic poison are well known to the medical student and the practitioner, the latter when dealing with particular patients for the most part allows himself to be guided by their personal predilections towards "stimulants." It is not surprising, therefore, that the present attitude of the public, as disclosed by the war conditions, should be one of absolute obsession in favor of alcohol. This attitude is consequent largely upon the importance attached to its use by the Army Medical Department, partly upon the coincidence of desire with the pressure of trade influences and the tacit approval of the faculty, and, in the case of the uneducated of all classes, upon the inability engendered by its use to realize what alcohol is doing to produce an unintelligent acquiescence in "things as they are."

An important factor in maintaining what practically amounts to a condition of national narcosis is the attitude of the organized betterment agencies towards the temperance movement. This attitude is based upon the idea promulgated by some of the leaders that the temperance cause has fulfilled its function and that national sobriety is to be brought about by the development of social and industrial ameliorations. Agreement might be possible on these lines were the relation of alcohol on the one hand and of abstinence on the other recognized, and were they assigned their true position as cause and cure. An occasional opportunity for stating the case is afforded in some branches or meetings, but the general tone of indifference assumed by the leaders of social forward movements towards the temperance factor, which should be the most prominent because it touches the springs of all their operations, governs the attitude of the whole industrial community.

The temperance outlook in Britain, therefore, is chiefly dependent upon efforts to convince both the leaders and the led in the progressive democratic movements, which are expected to spring into supreme activity after the war, that nothing they can do will much avail unless it be accompanied by a guarantee against that deficient mentality which is the inevitable product of the alcohol habit, and is the chief cause of failure in dealing with employers and business managers when complicated negotiations are under discussion. Evidence supporting this conclusion is not infrequent over here, and the positive argument afforded by the action of the business men of the United States, in excluding the drinking man from the factory and works, is of great value in pressing home to our industrials the need for them to deal with the drink problem for themselves. Concentration upon war work hinders the voice of reason from having its due weight at present, but signs are not wanting that the influence of alcohol is not so active as it has been in the ranks of responsible labor.

Operations along the line of enlightenment upon the mind of the new democracy would appear to be the most productive means of breaking the vicious circle of drink, poverty, disease and social inanition, in which the first is the strongest link. The research and evidence of the fathers from Benjamin Rush to Benjamin Richardson are still the most potent educative force, confirmed as they are by the modern school of medical and economic science. By applying this force to the physical and mental regeneration of the potential parent of the next generation, the adolescent of both sexes between 15 and 25, and to the economic and environmental redemption of the industrial classes, it may be possible to cut off the entail of drink, which is the first fundamental in insuring an abstaining posterity.

The organization the writer has the honor to serve has for its principal present objective the moral and intellectual conversion of the adolescent and the industrial from alcohol to abstinence, by which it hopes to brighten the temperance outlook in Britain.

THE TRAVELING ALCOHOL EXHIBIT

By EDITH M. WILLS

FOR nearly five years the writer has been practically constantly in the field with the traveling alcohol exhibit of the Scientific Temperance Federation. This exhibit was the initial effort in the United States to present on a large scale the facts about alcohol in exhibit form. From this has come later specialized exhibit work such as described in other articles by Mrs. Burt and Mr. Stauffer. Several smaller exhibits of the Scientific Temperance Federation reproducing parts of the larger exhibit are also in use, mention of which will be made later.

To reach the largest possible number of all sorts of people the policy in using the large exhibit has been to get it into exhibitions of a general nature which draw crowds who do not come primarily to see an alcohol exhibit, but who when they do see it throng it from morning to night.

Such have been the exhibits in connection with the great Missionary Expositions, International Hygiene, School Hygiene and Sunday School Congress, the Panama-Pacific Exposition in 1915. In 1916 the exhibit was with the Social Welfare Exhibit up and down the Pacific coast for nine months, and the Southern Sociological Congress Health Exposition in the Southern states for three months. Recently it has been a part of the Child and Industrial Welfare Exhibit of the Eastern States Exposition at Springfield, Mass.

With the approach of war and the probability of special activity on war temperance measures, the city of Washington became a strategic point and for three months, February to May, this year the exhibit was open to the cosmopolitan population of Washington.

The use of a large vacant store on New York avenue was given for the exhibit. A committee of some of Washington's most influential men and women, among them several members of Congress, served as an honorary committee of promotion. The leading stores of the city gladly allowed cards to be put up announcing the exhibit. The superintendent of schools had the attention of school children called to it. The writer, as director of the exhibit used several mornings each week in addressing the public schools of the city, bringing to the school children the facts about alcohol.

Special meetings were held in the exhibit with addresses by Hon. Addison T. Smith, member of Congress from Idaho; Col. L. M. Maus (U. S. A., retired); Dr. John Wadman, of Hawaii; Robert McNeill, Esq., and others. The health officer of the District of Columbia, Dr. Woodward, presided at one of the meetings.

The great display windows of the store were filled with models showing the facts about alcohol, and each day from early morning till the late closing hour at night saw hundreds of persons, sometimes as many as forty at a time, before the windows intently studying the models and charts. A very conservative estimate of the number reached places it above the 30,000

mark besides the 8,000 reached in schools or meetings. Even those who did not come into the store to hear the demonstrator in her talks and lectures carried away much information, all the more definite to them perhaps because they had studied it out for themselves.

One of the most important features of the exhibit is the opportunity it affords, especially in a city like Washington, to reach persons of influence able to pass on to others the information and inspiration they gather. The Washington exhibit was no exception. Its visitors included representatives from foreign embassies, people from at least eight foreign countries, university professors, publishers and authors, health officials, employers and labor representatives. Over twenty states are known to have been repre-



SCIENTIFIC TEMPERANCE EXHIBIT AS INSTALLED AT WASHINGTON, D. C., FEBRUARY-MAY, 1917, UNDER THE AUSPICES OF THE AMERICAN ISSUE PUBLISHING COMPANY

sented among the callers. Teachers, and public school and Sunday school pupils came to see, to hear and get literature.

The exhibit in the hands of a well-informed demonstrator exceeds any other method for reaching the people who are not well-informed concerning alcohol. The concentration of so much evidence in a comparatively small space, the resources it affords for meeting every objection or erroneous belief, conviction through eye as well as ear information, all give the exhibit a peculiar power in education. The opportunity it affords for personal conversation enables the demonstrator to help meet in a quiet way the great

variety of personal difficulties due to drink in its varied relations which the average platform lecturer cannot touch.

If it were possible to portray the experiences and observations concerning drink related by visitors there would be an exhibit of a composite "human interest" story whose cumulative tragedy would tear too sharply at the heart strings of the average spectator. It would make an exhibit too dreadful for the public to stand. Nothing has been said in a century of the miseries produced by drink which is not being duplicated in the experiences of men and women today, experiences that seldom find expression in words. Never have worse experiences been related to the director than those that were related as occurring in the city of Washington. Young men came in and begged that everything possible be done to pass the dry bill to save the Washington girls who were being wrecked in drinking places. A husband and father begged that something be done to bring home to women their responsibility for standing squarely against any drink in the home. Employers who had come from the Southern prohibition states related the difficulties with labor, forgotten under prohibition in the South, but renewed in the vicinity of wet Washington. Wife-beating and other tragedies due to drink came to light as voluntary particular evidence confirming the general evidence presented by the exhibit.

One thing is noticeable in exhibit work—the serious attention and response which it obtains. The air of idle or even supercilious curiosity with which men and women stop before the window or enter the exhibit speedily gives way to seriousness as they take in the facts presented. Not infrequently a visitor relates that attention to the real importance of alcohol was first arrested at this or a preceding exhibit. There are earnest inquirers for truth also—those who are questioning their old beliefs about drink and want to know what is true and why. The young man wants to know if it is really true that moderate drinking below the point of obvious intoxications may be harmful. A girl is surprised to learn that brandy may be injurious and brings her chum to see and hear the facts that had interested her.

The exhibit work of the Scientific Temperance Federation has not been confined to this single large exhibit. Several smaller ones, reproducing some of the models and charts are rented out for campaigns in places where, for reasons of time, space or expense, it would not be possible to use the larger exhibit. In one Massachusetts industrial city 25,000 persons of all classes visited such an exhibit in two weeks.

To get the best results from general exhibit work there are certain fundamentals to be observed:

1. It should be located on a main street where there is much passing, both day and evening.
2. The best place for this purpose is a vacant store. In general it is wise to rent the store outright for a given period or to secure a binding promise of its use, else the liquor interests may try to rent it away from you. Such an attempt has been made more than once.

3. The store should have a large window for display purposes, well lighted in the evening.

4. The person in charge should be thoroughly informed on the facts. Several assistants to take turns in sharing the work of explanation are an advantage. Even if untrained at the beginning, they soon become acquainted with the facts, so that when the exhibit is over there is left in the community a group of well-informed workers. If many foreign-speaking people are likely to be present provision should be made for explaining to them in their own language.

5. The explanations and demonstrations given in connection with the exhibit should be based on the principle, "Teach, not preach." It is not moralizing or drawing of conclusions as to action that is wanted here. Put facts clearly before people in the proper relations to every-day life and they will draw the right conclusions for themselves.

6. Interest school authorities, teachers and school children. Arrange for special hours in some cases for school children when facts and talks will be given especially adapted to them.

7. Get publicity through the press. What is going on at the exhibit often makes good news notes. Get local doctors or business men to give short practical talks. Reports of these in the papers will carry the facts still further.

The exhibit "reaches the people where they are" with the facts about alcohol. It presents concrete lessons applied to the every-day life of man, woman and child. It affords opportunity for meeting personal problems, for clearing up misconceptions, for removing errors concerning alcohol.

* * *

INDUSTRY'S PART IN ANTI-ALCOHOL EDUCATION

By LILLIAN BURT

THOSE who are investigating the causes of accidents have been forced to consider the effect of alcoholic liquors on health and all that goes to make a man defective; and to also consider the relation of alcohol to the so-called psychological causes for accidents, and all other social aspects of the "alcohol problem." These investigators have shown the heads of our great industrial plants that both employer and employe are being injured more seriously even by the moderate use of alcoholic liquors than has been generally known.

As a means of permanently eliminating the use of alcoholic liquors as a factor in accidents, many employers of labor in large plants have provided for their employes, a series of scientific lectures or talks. These lectures are demonstrated by charts, posters, models and microscopic specimens, bringing to the mind facts and truths in a way to make a deep and lasting impression.

This industrial educational work has been inaugurated and carried on by the Safety and Efficiency Bureau of the Ohio Anti-Saloon League, Mrs.

Lillian Burt, director, Columbus. Many of the great corporations have made it a part of their general welfare work. The exhibits are carried into the plants and the men, in groups of twenty-five to one hundred, are brought together on the company's time and given an hour to hear the talks and study the microscopic specimens. Where foreign-speaking men are employed, they are brought in groups and taught by those who speak their language. It is found that in our larger cities the Polish, Greek, Roumanian, Italian and other priests and orthodox ministers are only too glad to study the question, which is also their greatest problem, and then spend hour after hour in presenting it to their people. Many men who have not found a church home in this new land become regular church attendants as well as abstainers, from this work among them. These classes are taught about eight hours a day, reaching as many as 3,000 men per week. The men listen respectfully and attentively and in many cases ask if their women may come for the same talk at night. Of course this privilege is gladly accorded them. The quickness of understanding of these people is often a very great surprise to the teacher.

When these men, many of whom have never had the privileges of education, are given this opportunity to learn the relation of alcohol to their own health and lives, the lives, health and general welfare of their children, and especially the effect of alcohol upon the unborn child, it is found that many become abstainers from intelligent choice who would never have changed their habits through the influence of preaching or moralizing.

Many interesting and some pathetic incidents occur after these talks. Great, broad-shouldered fellows are not ashamed to brush the tears from their cheeks as they exclaim, "Why in God's name did not someone tell me this before!" Others have returned after a few weeks dressed all up in new clothes and shoes and proudly calling attention to the new outfit, say: "Since hearing talk, no more booze, fine clothes, feel great."

In every instance the owners or managers of the plants where the work has been done have written splendid letters of commendation testifying that they had received great benefit for the time and money expended, and that they were convinced that this method of reaching these people with these facts cannot be excelled.

The workmen hear these lectures in their own shops where they feel "at home." They come in their shop clothes and are comfortable and at ease. They are accompanied by their shop companions, with whom they talk freely and discuss the questions which are so new, interesting and wonderful to them and which bear so directly upon the vital things in their lives. They are paid for their time while attending and the results are very gratifying to all concerned.

The teachers carefully avoid all mention of the saloon, the traffic, and general wet and dry arguments are omitted. This removes all objections and makes the establishment of the work easy. By this method the men learn that alcohol is a poison, that beer does not give strength or make them well when sick, and that it should be shunned as are other things that tend to produce trouble and suffering in the home.

POPULAR EDUCATION, THE FOUNDATION OF REFORM

BY HENRY STAUFFER

Superintendent Fox River Valley Efficiency League, Wisconsin

AFTER some years of study of the economic and political phases of the alcohol problem I was gradually forced to the conclusion that in order to solve it, it was necessary to go directly to the root of the difficulty, i. e. the delusions which still prevail regarding the effects of alcohol. These deeply rooted errors can be removed only by teaching the facts in such a way as to be easily grasped by the average man.

A few years ago the Fox River Valley Efficiency League was organized in order to meet this need, which is especially urgent in this state, with its large foreign population.

The two outstanding features of the work our league is doing are, the Efficiency Institute, and the prominence given to the local physicians.

The Efficiency Institute is usually held in an armory or city hall. One of the unique features of an institute is a survey of the city in which it is held with a view to getting at the actual results of the drink habit and liquor traffic in that community. Following is an outline that was used in making the survey of Green Bay, Wisconsin, a year ago. Each of the sections, "the saloons," etc., was in charge of a sub-committee:

I. The Saloons: 1 Nationality of saloonkeepers; 2 patronage—men, young men and women; 3 money spent annually for liquor; 4 laws violated; 5 accessories—slot machines, music, etc.; 6 checks cashed, etc.

II. Alcohol and Crime: Arrests for drunkenness, disorderly conduct, murders, etc.; sources of information—police records, court records, files of local newspapers for past five years.

III. Alcohol and Pauperism: Sources of information—charity societies, city poor officers, social workers, etc.

IV. Alcohol and the Employer: 1 How many are abstainers? 2 what rules against drink have been adopted? 3 how many favor prohibition? 4 how many favor Sunday closing? 5 how many favor the educational program of the league? 6 to what extent is alcohol a factor in the labor problem? 7 how many employes are incapacitated for work on Mondays after pay-days and holidays on account of drink? 8 attitude of the labor unions and leaders on the drink habit; 9 attitude of employes on present movement for greater efficiency; 10 what is the actual difference in efficiency between drinkers and abstainers? Actual tests to be made in different lines of work.

V. Alcohol and the Citizen: 1 How many are abstainers? 2 how many favor prohibition? 3 how many favor Sunday closing?

VI. Alcohol and the Family: 1 Divorce; 2 wife desertion; 3 child labor; 4 to what extent does drinking prevail among children? 5 instruction regarding the injurious effects of alcohol in public and parochial schools; 6 the social evil.

VII. Alcohol and Disease: Insanity, diseases in general, and deaths due directly or indirectly to alcohol during the year. It is expected that local physicians will furnish the necessary data.

VIII. Alcohol and Business: What proportion of uncollectable debts contracted annually in the city are due to alcohol?

One of the most valuable features of the Institute is the anti-alcohol exhibit which consists of the following sections, each section being in charge of a steward, who has prepared himself to explain the charts, posters and cartoons composing his section:

Alcohol and Efficiency.

Alcohol and Industry.

Alcohol and Vice and Crime.

Alcohol and Disease.

Alcohol and the Child.

Alcohol and Medicine.

Alcohol and Economic Waste

Alcohol and the Protest of the Women.

The City of — (name of city in which Institute is being held) in account with Alcohol.

In the last section named are shown the results of the local survey in the most striking way possible. In addition, a chemical analysis is made of the beer manufactured by one of the local breweries, and the results are displayed by the use of 24 beer mugs, which show the percentage of alcohol, nutriment and water contained.

Public addresses are made each evening of the Institute, nearly always by local men. The opening address is generally given by a local physician. The man who has superintended the survey speaks on "Our City in Account With Alcohol," using with telling effect the findings of the investigators. If it is possible to secure them, a prominent employer and an influential workingman are asked to speak on "Industrial Night."

The Institute serves as a community burning glass by means of which all the knowledge attainable on the various phases of the drink problem are brought to the focus of expression within a few days. All no-license campaigns should begin with such an Institute. Local papers gladly give full reports so that the entire community is reached as it never could be reached in the ordinary way. Every effort is made to teach the facts by appealing to the eye. A red light flashes every eight minutes, thus indicating a death somewhere in the United States as the direct or indirect result of drink. Very large pen drawings of a normal brain cell, and of the abnormal brain cell of a drunkard are placed side by side on the platform facing the audience.

Special prominence is given to the local physicians by asking them to sign for publication a series of resolutions expressing their convictions on the nature and effects of alcohol. Following are the resolutions which were signed by more than a hundred physicians in connection with the four In-

stitutes conducted in Michigan during the state-wide campaign in that state last fall:

TO ALL WHOM IT MAY CONCERN:

Whereas, it has been clearly established by the painstaking experiments of European and American scientists that alcohol is a definite POISON; and

Whereas, it is now well known that the general use of alcohol as a beverage is the direct or indirect cause of a very large percentage of our crime, insanity, epilepsy, feeble-mindedness, disease, divorce, child misery and pauperism; and

Whereas, the new definition of alcohol as a POISON contradicts all our inherited notions regarding its value as a food and a beverage;

Therefore, Be It Resolved, That we, the undersigned physicians of Houghton county, hereby express to the people our earnest convictions regarding this vital matter as follows:

Resolved, That we positively condemn the beverage use of all alcoholic liquors, including wine and beer, because, by their effects on the germ plasm they curse the unborn child; because even their moderate use has been proven to reduce the efficiency of the user; and, because, in multitudes of cases, the continued use of alcohol in moderation proves to be impossible. The moderate drinker is a social menace. If he drinks without becoming a drunkard, his example is certain to influence others, who, by imitating him, acquire an ungovernable appetite for liquor. If he finally passes from moderation to excess, as multitudes of moderate drinkers do, he and his family become a burden to society. It is impossible to know beforehand whether one will be able to drink moderately or not. After one finds out that he cannot drink moderately, it is generally too late to quit. Therefore, total abstinence from all intoxicating liquors is the only guarantee of safety and of the highest personal efficiency.

In connection with the Houghton County Institutes these resolutions were printed also in Croatian, Finnish and Italian, and were printed in many of the daily papers of the Upper Peninsula.

The resolutions signed by 38 physicians of Saginaw were reprinted and distributed all over the state as a campaign document.

The address on beer by Dr. R. E. Minahan, at the Green Bay Institute has been printed and widely distributed in this section of the state. In addition it has been mailed to all the physicians of the state and to all the members of the present Legislature. As a consequence of the delivery of this one address the author is engaged to repeat it in many sections of the state, and has become one of the most generous contributors to the funds of the league.

The posters which we are printing have up to the present treated the scientific phases of the subject mainly. The last one, however, is on "Prohibition and the Workingman." These are put up in mills, factories, railroad cabooses, doctors' offices, libraries, and city and rural schools.

My experience a few weeks ago shows that employers are beginning to appreciate the necessity of beginning at the beginning in winning the drinking men to the life of abstinence. I was invited by the head of the largest packing firm in Milwaukee to address all the foremen of the plant on "Alcohol and the Brain," at 2:30 p. m., *on company time*. The reason why this employer of 1,300 men is taking so deep an interest in the instruction of the men in his employ is because sometimes as many as 110 of them fail

to report for work the day after pay-day on account of alcoholic poisoning, and as a result the company loses \$500 a day.

If it is possible to win men to efficiency through abstinence, it evidently is shortsighted business policy to continue on the present wasteful plan.

The change of sentiment which has been effected in every city in which an Institute has been held fully justifies the advocates of scientific education by popular methods in their conviction that the foundation of lasting reform as regards the drink curse is a general diffusion of the tragic facts about alcohol by the use of means which compel attention.

* * *

ROCHESTER POSTER CAMPAIGN

THE poster campaign idea is not new, but Rochester, N. Y., has launched one of its own. The committee describes it in the following terse paragraphs:

What is it? A campaign of education by means of posters, concerning the effects of the use of alcoholic beverages.

Where do the posters come from? They are prepared by a committee of ad men, who write and design them, giving service which would cost hundreds of dollars if paid for at regular rates.

How are the facts stated on the posters obtained? They are secured from various temperance organizations, from newspapers and magazines, from the **Scientific Temperance Federation**, statements of physicians, employers and public officials.

How are the statements verified? By an advisory committee consisting of five prominent Rochester men, who are giving much valuable time to examining and approving the posters. Any facts which they are doubtful about are referred to an expert, whose services they have secured for this purpose.

Where are the posters displayed? They are now in the factories before 40,000 employes—in all the department stores; in the freight houses, round houses and passenger stations; in the hospitals, the Y. M. C. A., the Y. W. C. A., the University, Suffrage headquarters, Salvation Army, Rescue Mission, before many churches, in many vacant windows. Smaller cards containing the same statements are shown in many shop windows.

How are the posters received? Everywhere with approval. Employers are glad to display them; men from other cities are asking for them; the output is increasing weekly.

What of their effect? We have been told repeatedly that the good they are doing is more than can be reckoned. There is no way of measuring it.

Who is responsible for the campaign? The Poster Campaign Committee consists of one delegate from each of the Rochester churches, so that the churches through their representatives are responsible for the movement.

What has been done? Seven different posters have been put out thus far. A new one containing a different statement is put out every other week.

How has it been financed? At the beginning several hundred dollars were contributed by a few friends to give the committee an opportunity to demonstrate that the campaign was practical and effective.

What more is proposed? The effect of advertising is cumulative. We would like to increase the number of posters on display and continue the campaign for at least a year longer, or for two years if possible. We would like to employ some nicely illustrated posters. The newspapers will publish them if we can reduce to etchings of the proper size; made in the form of slides the picture houses will show them; the window displays can be made to tell a story which a poster cannot tell; newspaper advertising will permit of lengthier statements and arguments which a poster cannot contain.

Which Is Better?

1 Man's Overcoat	\$1150	<div style="border: 1px solid black; padding: 5px; margin: 5px;">Beer For The Man</div> <div style="text-align: center; font-size: 1.5em; margin: 5px;">- OR -</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">Clothing For The Family</div>	<div style="border: 1px solid black; padding: 5px; margin: 5px;">FOUR GLASSES OF BEER A DAY FOR ONE YEAR</div>
1 " Suit	1075		
1 " Sweater	298		
1 " Hat	100		
2 Suits Men's Underwear	118		
1 Woman's Suit	500		
Separate Skirt	198		
Silk Blouse	125		
Petticoat	69		
Hat	298		
1 Pair Women's Shoes	195		
2 Suits Women's Underwear	98		
2 Boys Suits	318		
2 Overcoats	450		
6 Blouses	200		
2 Hats	90		
2 Sweaters	390		
6 Hose	90		
2 Little Girls Coats	796		
4 " Wash Dresses	400		
4 Suits Underwear	156		
2 Girls Hats	98		
12 Children's Handkerchiefs	18		
TOTAL	\$7300		\$7300

—Photo by courtesy of Miss Georgia Robertson

USING A WASHINGTON, D. C., BILLBOARD TO TEACH ECONOMIC FACTS

RHODE ISLAND TOWNS' POSTER CAMPAIGNS

NEARLY 100 towns and cities in Rhode Island have begun a forty weeks' poster campaign under the leadership of the Superintendent of the Rhode Island Anti-Saloon League. The posters used are those prepared by the Scientific Temperance Federation and issued by the American Issue Publishing Company.

The poster campaign, properly managed, gives a chance constantly to educate the general public in the very best possible way. Billboard space need not be hired. Any church that controls its own grounds can put up a poster board on its property and will thus reach the people even better than by a billboard where the poster would be swamped in advertising. Waiting-rooms, car and fire stations, Y. M. C. A. bulletin boards and even private lawns can be utilized in giving opportunity for this form of temperance education. The more unusual the place the better, provided there are numerous passers and the poster is so placed as to be easily read.

THE FOOD AND LIQUOR SITUATION

By THE EDITOR

The swift, sharp demand that foodstuffs of the United States needed by the people of the world shall not be used in making alcoholic liquors has brought out of a situation of but vague realization of the food loss in this manner, certain clear-cut understandable facts as to the enormous and practical value of this loss. The following article brings together the best of the now well-established facts which may be relied upon as representing the situation up to the present time regardless of what action may be taken toward securing war prohibition.

A WORLD facing hunger calls for relief from the diversion of foodstuffs into the manufacture of alcoholic liquors. Early in the war German and Austrian scientists voiced their protest against this use of potatoes and grain likely to be needed by the people. As the months went on the protest rose from all nations. Limitations on spirits-making and beer-making have been imposed in many countries.

EUROPEAN FOOD SITUATIONS

The food shortage increases. The restlessness over the liquor production grows. The United Kingdom Alliance of Great Britain relates with astonishment that despite the demands for food economy the parliamentary secretary of the Ministry of Food had announced in Parliament that there was already in hand (April, 1917) enough malted barley for six months' supply of beer which the interested statisticians showed would be sufficient to provide five million people with bread for thirteen weeks.

In Switzerland, while rice and sugar are rationed out at the rate of from ten to eleven ounces of rice and one pound of sugar per individual per month, a single vermouth manufacturer in Geneva could get eleven tons of sugar. Great quantities of rice are said to be stored in the brewers' warehouses. Though the bread-card with a half-pound bread allowance a day is impending, the amount of grain used by the brewers in a year would supply, according to *Volksrecht* (Zurich), the whole people of Switzerland with bread for two months. Food materials from abroad are in harbors and outside stations which cannot be obtained for lack of transportation facilities. But cars could be obtained for bringing in some 19,000,000 gallons of Spanish wine.

Italy is about to have the sugar-card, says *Courriere della Sera* (Milan). The most that is expected from it is a daily allowance of 15 or 16 grams of sugar per person, a quantity insufficient for actual limited needs. If the news is true, the journal comments, "the grains of sugar will be few and as an offset the grains of sense will not be numerous." The government has decided to prohibit certain confectionery shops. "But it knows that a great quantity of sugar is used in making liquor. If sweets are a luxury, liquor is a luxury, and when sugar is refused to the candy-makers, it should also be refused to the liquor-makers." Besides, the drinker has an unfair advantage. In addition to his regular sugar allowance, he can get considerable

more sugar in his "one, two, or ten glasses of yellow, green, white, or red poison," while the coffee drinker will have to content himself with half sweetened morning coffee, and if he wants a second cup, it must be, for patriotic reasons, entirely unsweetened."

The French protest against all cakeless days while there are no alcoholless days is mentioned in another column.

The foodstuffs used in Canada in making alcoholic beverages in the year ending March 31, 1916, according to the *Good Templar*, (May, 1917), were, barley, 2,353,273 bushels; Indian corn, 589,394 bushels; rye, 123,801; oats, 4,975; molasses, 14,884,460 pounds.

EXTENT OF WORLD SHORTAGE OF FOOD

Promptly with the entrance of the United States into the war, the question of war prohibition became acute, especially as a food conservation measure. There is a world shortage of food, amounting in wheat alone last year to about 960,000,000 bushels, according to the reports issued (March, 1917) by the International Institute of Agriculture. America must feed Europe, or at least, must furnish, according to Mr. Hoover (*Continent*, June 7, 1917), from six to eight hundred millions of the more than nine hundred million bushels of grain which represent the minimum needs of the allies and neutrals for the coming year. This grain can only be obtained by small savings here and there. *No one source would afford so large a saving as the quantities of grain now used in brewing and distilling.*

Mr. Hoover stated before the Senate Committee on Agriculture that the allies will need "from a fifth to a quarter more than can be sent them if they get everything we could hope for from every quarter of the globe."

UNITED STATES FACTS ON FOOD USED IN LIQUOR MAKING

In April, authoritative facts as to the quantities of food materials used in liquor were lacking. Under stress of demand for information certain facts and estimates have now become clearly established.

Some of these are the following:

In 1916, according to government figures issued by the Department of Agriculture, *there were 107,784,415 bushels of grain used in making distilled and malt liquors*, besides 152,142,232 gallons of molasses, 54,934,621 pounds of grape sugar, 2,742,854 gallons of glucose or syrup, 19,112 gallons and 24,756,974 pounds of "other materials."

Mr. Hoover is begging the women of the United States to save at least one slice of bread a day and so save 1,000,000 loaves of bread a day. But Prof. Irving Fisher, of Yale University, estimates that *the grain alone used in the manufacture of liquor in the United States in a year would furnish 11,000,000 pound loaves of bread a day.*

WHO USES FOOD RESOURCES FOR LIQUORS?

In the year ending June 30, 1916, brewers used 3,556,103,596 pounds of foodstuffs. Distillers used 3,777,609,748 pounds.

But in the case of distilled spirits, a quantity equivalent to about 50 per cent of the year's output was used for denaturation, government, and scientific purposes, or export as alcohol. This reduces to 1,888,804,874 pounds the foodstuffs used by distillers for alcoholic beverages. The brewers used 3,556,103,596 pounds. *Thus the brewers used in making alcoholic beverages nearly twice as much foodstuff as the distillers.*

The brewer used in 1916, 37,451,610 pounds of hops. These are not food, but on the basis of the last census acreage, *the land used for hops, if planted to potatoes, would produce over 4,000,000 bushels of potatoes.*

The grain alone used in making liquors for a year, if fed to hens, would produce two billion eggs, according to estimates prepared by Mrs. E. H. Tilton.

Economists of Harvard and Yale Universities stated that *the foodstuffs used in liquor-making in 1916 were sufficient to meet the energy requirements of 7,000,000 men for a year, even after allowing for the denaturation and scientific purposes.*

ANSWERS TO THE BREWERS' CLAIMS

The brewers challenged this estimate of 7,000,000 men in great newspaper advertisements, claiming that they only used enough to feed 2,000,000 men, as though that in itself were not a great loss! Two million men is twice the population of starving Albania. Food for two million men would meet for three months the needs of the entire population of Belgium such as it was before the war.

Investigation of the brewers' figures showed that the 7,000,000 men was a fair and just estimate. The brewers had understated in their advertisements the amount of food materials used by both the brewers and distillers. They had made a second deduction for denaturation. They had deducted molasses and cattle feed regardless of the fact that molasses unfit for human food could be used for cattle feed (which they also deducted), and for making denatured alcohol (for which they had twice made deductions). They rated the brewers' and distillers' grains as equal in food value to the original grain, disregarding the fact that in getting this refuse for cattle food they had destroyed about two-thirds of the grain which would have been useful for human food.

The matter of cattle food will be discussed later.

CAN BARLEY BE USED FOR HUMAN FOOD?

The brewers claimed that barley is not widely used for human food, and therefore, when used in beer, entails no particular loss.

But a statement published in *American Beer* by the United States Brewers' Association (1909) said that barley is used for human food in almost every civilized country.

Herbert C. Hoover, in the hearing before Senate Committee on Agriculture (Report, pp. 380-417), said:

"Barley mixed in the bread makes a bread which has as fine a texture as wheat . . . and would enable us to release just exactly that quantity of wheat. . . . There is a certain deduction from the barley—the total barley used in brewing—to account for the malt

which is given back to the feed, but even then there is a large margin of saving if the brewing could be cut out. . . . The difference between the feeding value and the fodder and the intake of the brewery in grain means just that much more foodstuffs to our allies. . . . We could save from fifty to sixty million bushels of grain on the brewing side, after having allowed for the fodder proposition, and that grain is of utmost value to our allies."

Prof. A. E. Taylor, Professor of Physiological Chemistry, University of Pennsylvania, and crop expert, Department of Agriculture, says (Senate hearings, p. 438):

"In my opinion, on the basis of crop prospects, the need of grain and especially barley, which has proved itself valuable as a flour, is such as to make it imperative upon us after the present maltings in operation and under contract have been concluded, in about three months, to cease the manufacture of malt for internal or export trade for brewing."

THE CATTLE FOOD QUESTION

The brewers have laid much emphasis on the value as cattle food of refuse from brewing and distilling processes. There are several things to be said on this point.

To obtain cattle feed by this method is a wasteful process. Brewers' and distillers' grains cannot be used directly for human food. They must first be converted into milk or meat. One hundred pounds of brewers' grains give only 18 pounds of solids for food in the form of milk; less than three pounds in the form of beef.

According to their own figures, the brewers, for example, took from human consumption 2,312,073,104 pounds of food. From the refuse of this over two million pounds, man got back less than one-fifth in food value in milk; less than one-thirtieth in food value in beef.

It is not necessary to destroy grain suitable for human food to get cattle food. "The refuse from milling when corn, barley and rye are made into human food is quite equal to the refuse from breweries and distilleries." (Prof. Thomas Carver of Harvard University.)

Hence the miller not only supplies cattle food but at the same time as his main product supplies food suitable for both man and animals. The brewers' and distillers' main product is alcoholic liquor. The two-thirds of the foodstuffs which they destroy in producing their cattle food is lost so far as healthful human nutrition is concerned.

PROTEIN FOR 6,000,000 PEOPLE LOST

There is another aspect of the food loss in making liquors—the loss of protein. The New York Health Department, relying on figures from a source which must be considered authoritative, states that if protein alone were considered the conversion of *grain* (saying nothing about other food substances) into alcohol rather than into bread, represents a distinct loss of protein enough to supply the *protein* needs of 6,000,000 people for one year.

"No amount of sophistry," says the New York Health Department bulletin, "can overcome the fact of this absolute waste of an essential constituent of our food. How much longer can we afford to waste valuable food materials on such an appalling scale?"

MUST THE DAIRYMEN HAVE LIQUOR REFUSE FOR FEED?

The brewers claimed that the dairymen must have the brewers' and distillers' grains to feed their cows.

Sufficient answer is found in resolutions passed in May by the New England Milk Producers' Association, representing 8,000 dairymen, asking for *national prohibition in order that grain might be conserved for feeding their cattle.*

As already shown, the dairymen could get cattle feed of equal or slightly more value if the original grain were milled for human use and the millers' refuse made available for cattle. Brewers' and distillers' refuse is somewhat richer in protein than the original grains, merely because in making liquor the fermentation processes reduce the carbohydrate elements of the grain, as starch and sugar are converted into alcohol. The protein is left, as it is not desired in the liquor. *Thus the proportion of protein is higher in the refuse from liquor making processes, but at the expense of the destruction of other food materials.* This point should be clearly understood as a pro-liquor lawyer arguing before a legislative committee recently gravely asserted that the protein was increased by the liquor making process. *It is not an increase of protein but a decrease of carbohydrates—an actual loss of energy and heat-producing food that occurs.*

But even granting the higher proportional protein content of brewers' and distillers' refuse as cattle food, the *total nutritive value is less than that of the original grains chiefly used in liquor-making*, as is shown by the 31st annual report (1912) of the Geneva, N. Y., Agricultural Experiment Station.

DIGESTIBLE NUTRIENTS IN 100 POUNDS

Barley	75.9 lbs.	Corn	77.9 lbs.
Brewers' Grains	56.6 lbs.	Distillers' Grains	74.7 lbs.
(Dried)		(Dried)	

FUEL VALUE PER 100 POUNDS
U. S. Farmers' Bulletin, No. 22 (1902)

Barley	1434 calories	Corn	1572 calories
Barley Meal	1389 "	Corn Meal	1477 "
Brewers' Grains (dry).....	1158 "	Corn and cob meal.....	1329 "
Brewers' Grains (wet).....	306 "	Distillery grains (dry).....	1199 "
		Distillery grain (wet).....	306 "
		Rye	1524 "
		Rye distillery grain (dry).....	1252 "

The brewers claimed that the dairymen must have brewery and distillery refuse as "cheap" feed. But United States Agricultural Bulletin No. 459, issued as late as December 15, 1916, gave the following figures as to the cost per therm of net energy value in grains and brewers' grains:

ONE THERM	COST
Dried brewers' grain	2.15 cents
Wheat bran	1.98 "
Cotton seed	1.67 "
Wheat middlings	1.6 "
Gluten meal	1.6 "
Corn meal	1.4 "

But the bulletin goes on to say that though corn-meal is the cheapest source of energy food, with wheat middlings as a variety, neither supplies enough protein. "Of available feeding stuffs rich in protein which may serve to balance the deficiency of this ingredient, gluten meal is relatively the cheapest and cotton seed meal the next." Not a word about brewers' grains as a "cheap" source of protein even in 1916 when grain was high.

In all these comparisons it must constantly be borne in mind that brewers' grains have a higher proportion of protein *only* because carbohydrate has been removed and made into alcoholic liquors.

Thus while it is true that brewers' and distillers' grains are used in cattle feed, the facts show that they represent a wasteful method of securing feed, that their total nutritive value is less than that of the chief grains from which they are derived, that their fuel value averages less, and that as a source of protein brewers' grains are more costly proportionately to results than feed derived from other sources.

The important point about the whole question of liquor refuse for cattle is that it can only be obtained by using up food needed by human beings, and, what is even worse, thereby converting food into a drink that uses up money needed to buy other food, a drink that also wastes human power.

This is not a question of one nation alone. Already the inquiry has been pertinently made, Why should America economize in food and stop the manufacture of food into liquor for the sake of saving food to send to the allies and neutral countries while Great Britain and other countries continue to make foodstuffs into liquor? The question does not absolve the United States from the responsibility of what is necessary to save food and manpower regardless of what other nations may do, but other nations ought to understand that if America stops the manufacture of food into liquor, her people will ask, "Why should America sacrifice and eat less bread that Europe may have beer?"

It has been said that this war may be won by the last 500,000 pounds of foodstuffs. The situation is apparently narrowing itself to the question of Bread or Liquor—Which will the nations choose? And upon the answer to that question may depend the future history of the world.

THE TWO SILENT ENEMIES

HERE is probably nothing that should spur us on to the most pronounced activity like the grim facts that now stare us in the face in Europe, says the *Monthly Bulletin* of the Boston Health Department. Venereal diseases have permeated France, England and Germany to an appalling degree, gradually sapping the life blood out of these three great countries and taking an awful toll of misery and disease for posterity in addition to the tremendous burdens being piled up through the physical destructiveness of war.

EXTENT IN EUROPEAN ARMIES

The reliable facts at hand, according to Dr. M. G. Exner (*Social Hygiene*, April, 1917), show that during the first eighteen months of the war, one of the great powers had more men incapacitated for service by venereal disease contracted in the mobilization camps than in all the fighting at the front.* In all the European armies at the present time vice and its consequences constitute one of the most serious, if not the most serious, of army problems.

PREVALENCE IN CIVIL LIFE

As to the prevalence of these diseases in civil life, Dr. Ira S. Wile, of New York, states (*New York Medical Journal*, June 23, 1917) that while New York was shocked at the occurrence of 9,023 cases of infantile paralysis in 1916, there were 19,297 cases of tuberculosis reported, and asks, "But who realized that there were 20,128 cases of syphilis and 6,220 cases of gonorrhea reported to health authorities. Syphilis with its dysgenic effects, including abortions, miscarriages, infant mortality, mental defects and insanities, yields results which are all but concealed in consideration of the statistics of its mortality. The other disease has a hideous trail of blindness, sterility and surgical mutilation. From the public health standpoint these diseases, as far as New York city is concerned, should be placed practically at the head of the list in importance."

A brigade commander on the Mexican border told a Y. M. C. A. secretary (*Association Men*, July, 1917) that as a result of the investigations of the relations between drink and vice in court martial cases in the brigade, it was found that 65 per cent of the cases were directly traceable to drink, and of the remaining 35 per cent, he had a conviction that drink was indirectly responsible for 31 to 35 per cent.

*In another article Dr. Exner states that "in the same country there are 17,000 cases of venereal disease concentrated in a single hospital camp. Not long ago 80,000 soldiers on their way to the front passed through a certain Mediterranean city with an average stay of two weeks in the city. The medical service is authority for the statement that 10 per cent of the men became infected with venereal disease during that stay."—From *Friend or Enemy*.

LIQUOR AND VICE GO TOGETHER

Dr. Exner found on the border last year that saloons and houses of vice came together. Of the two camps showing a percentage of these diseases far below those of any of the other camps, one was too remote and difficult of access for even the vice interests. In the other the commander resolutely suppressed both prostitution and the saloons. "No more contented, orderly, better disciplined, better trained, more efficient or more loyal body of troops could be found anywhere on the border. These men were proud of the reputation of their regiments. Many of them said with a ring of pride, 'Oh, we have a clean bunch here.'"

Dr. George J. Kneeland, in an article in *Social Hygiene* (Jan., 1916) from which quotations have already been made in the JOURNAL, related to some detail the extent to which the sale of beer and wine is used in houses of prostitution, both as a means of additional revenue and as a physiological measure for increasing, through the impairment of self-control, the gains for which the houses primarily exist.

PHYSIOLOGY AND EXPERIENCE TESTIFY AGAINST ALCOHOL

Dr. Haven Emerson, Health Commissioner of New York, in a statement written for publication to Mrs. E. H. Tilton, June 4, 1917, said:

"There is no difference of opinion among physicians, that alcohol is a contributory factor of the first importance in the development of venereal disease, for the reason that self-control upon which continence must depend, is lost as the result of alcoholic indulgence. The higher attributes of mankind, namely, self-control, or (in physiological terms, inhibition), judgment and discretion, are those which are most lately acquired as properties of human character, and these are the first to be destroyed on the exhibition of narcotic drugs, especially the chloroform, ether and alcohol series.

"The experience of Canadian physicians, directly quoted to me, the experience of the dispensaries in New York, with which I am personally familiar, and the case records of many private physicians with whom I have been in close personal contact, convince me that the figures generally quoted are correct, to the effect that between 75 and 90 per cent of the venereal infections in young men are acquired while they are under the effects of alcoholic indulgence.

"There is no question in the minds of any of those responsible for the medical care of the army, or the care of men in civil life, that incontinence is wholly unnecessary and absolutely undesirable, or that the removal of accessibility of alcoholic beverages will enormously reduce the amount of incontinence which results in the spread of venereal disease."

It is logical that Dr. Wile (*New York Medical Journal*, June 23, 1917) in indicating education, rational recreation, higher wages, early marriages, better houses and privacy, the restriction of dance halls, the raising of the age of employment, improvement of the standards in industry, as necessary to short-circuiting desire into normal and healthful channels, should include also *the control of the sale of alcohol*.

UNITED STATES ARMY PRECAUTIONS

In preparing for the new United States army, Senator Jones of Washington offered an amendment to the army bill, which was immediately agreed to by unanimous consent, authorizing the Secretary of War to do everything possible to suppress and prevent houses of ill-fame within any distance he might determine of military camps, stations, forts, posts, cantonments, training or mobilization places.

In offering the amendment, Senator Jones said, as reported in the *Congressional Record*:

"We know that drink is the cause of most of this disease, leads men into temptation, reduces their power of resistance, decreases their chance of recovery."

Secretary of War Baker has addressed a letter to the Governor of all states asking their co-operation in securing protection for army camps. He says:

"Our responsibility in this matter is not open to question. We cannot allow these young men, most of whom will have been drafted to service, to be surrounded by a vicious and demoralizing environment, nor can we leave anything undone which will protect them from unhealthy influences and crude forms of temptation.

"The greater proportion of this force probably will be made up of young men who have not yet become accustomed to contact with either the saloon or the prostitute, and who will be at that plastic and generous period of life when questionable modes of indulgence easily serve as outlets for exuberant physical vitality.

"I am determined that our new training camps shall not be places of temptation and peril.

"If the desired end cannot be otherwise achieved, I propose to move the camps from those neighborhoods in which clean conditions cannot be secured."

* * *

SACRIFICE is the philosophy of reform. Today Truth sounds the bugle note calling for more of these heroes. "Give me more soldiers," she says; "men who love principle; men who have convictions; men who will stand by them, alone if need be; men who are the sworn foes of injustice; men who love this nation more than they love themselves; men filled with the spirit of fraternal sacrifice—the spirit of victory.

—Walter R. Miles.

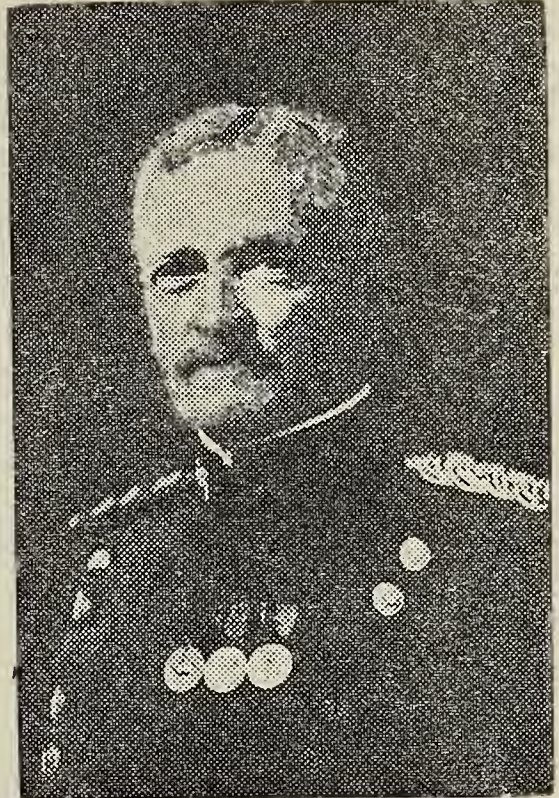
WHAT GENERAL PERSHING SAID

THE man who lives a clean life regardless of what others do or think is the man who inspires confidence in his fellowmen.

There was a time when it was a natural part of a soldier's existence to drink and carouse. That day is past with the soldier sworn to defend his country's flag and representing the power and dignity of the nation.

Strong muscles, clear brains, high ideals in the soldier, increase the fighting efficiency of the army, and these qualities of the citizen insure the permanency of our institutions.

The army is looked upon as representing the common people from which it springs, and the people here watch our conduct and study the character of every one of us. This thought should be an inspiration to patriotism, to manliness and to righteousness.—From an address at Ft. McKinley at the laying of the cornerstone of the Y. M. C. A. building. *Association News*, July, 1917.



GENERAL PERSHING

* * *

A NOTABLE NON-ALCOHOLIC MILITARY CAMPAIGN

By CHARLES BAILEY

"No alcohol, no crime, and the percentage of sickness was less than in any part of the British army at home and abroad."

HALF a century ago, October, 1867, began one of the most notable of Britain's many smaller military campaigns of recent times. It was conducted on abstinence principles, and afforded a telling proof that alcohol is not required for prolonged arduous exertions under the most trying climatic and atmospheric conditions. Not only so, it was also an undoubted demonstration that the non-alcoholic method is much superior.

Three years before, King Theodore of Abyssinia had imprisoned a British consul resident in that part of Africa. Subsequently pursuing further this autocratic, vindictive course of action, he placed several missionaries in durance, subjecting them to various indignities. For their release repeated demands were made by the British government, but these were refused or ignored, and ultimately, in 1867, it was decided to enforce the demands by military force. The campaign which followed was aptly and picturesquely described by Mr. Disraeli, the Prime Minister, as "the advance of Europe on the elephants of Asia across the ranges of Africa."

The campaign was not so much a military feat as a superb engineering achievement. The resistance of Theodore's undisciplined tribesmen was comparatively slight, but the difficulties encountered which had to be overcome in the nature of the country and the distance inland to be traversed were enormous. A road 400 miles long over precipitous peaks, some nearly 11,000 feet high, across deep defiles, and along steep descents, had to be constructed from the coast to Magdala, the Abyssinian capital. The way was practically destitute of any track whatsoever. The gorges and ravines in some instances were utterly impassable for wheeled vehicles, and perilous for baggage animals, one of these mighty ravines being four miles wide and 3,800 feet deep, with the upper parts of the sides well-nigh perpendicular walls. On the mountain summits the cold was extreme, while in the deep valleys the heat was intense. The troops had to proceed under a broiling sun, and then amid storms of rain and sleet; at one time almost burned with the tropical heat; at another, almost stagnated with Arctic cold. Week after week of incessant wet was also experienced at one period. The mere work of conveyance of supplies through such country and amid such difficulties was of itself sufficient to keep the energies of an invading army on the utmost strain. Rarely has an army struggled against climate and mountain in such tough antagonism as during this campaign.

Sir Robert Napier was the chief of the British expedition, and under him were 4,000 European and 8,000 native Indian troops. In October, 1867, the vanguard landed on the African coast contiguous to Abyssinia; in January, 1868, the advance toward Magdala began, and during the succeeding weeks slow but sure progress was made. By March the neighborhood of the fortress capital was reached; on April 10 a brave but unskilled attempt of Theodore and his men to resist was defeated, and on April 13 Magdala was in British hands and the purpose of the expedition achieved. Ere the end of July, so carefully had the plans of the campaign been formed, and so expeditiously and exactly were they executed, that the troops were back again in the home lands. The expedition was a triumph of engineering and organizing ability.

There was, however, another factor which contributed considerably to the marked success obtained. The campaign was conducted on abstinence principles. The sentence at the head of this article expresses the results. Consequent on the entire absence of alcohol, there was an entire absence of crime, and, remarkable to say, the health of the men was such that the ratio of illness was even less than that prevailing among the troops on ordinary service in Britain and Hindustan. This was the testimony of a leading officer with the expedition, Colonel Geary. Others competent to judge spoke and wrote in similar strain. The son of the commander-in-chief, Lieutenant Napier, declared that it could never again be said that alcoholics were necessary for the British soldier's endurance of hardships, as for several weeks they had had no liquor rations, no tobacco, and had in no wise suffered seriously therefrom despite the fact that the marches "had been inconceivably

trying." Alluding to the stupendous character of the task accomplished—the journey to Magdala, the defeat and almost annihilation of the opposing Abyssinian army, the capture of the capital fortress, and the return before the definite rainy season began, the exceeding smallness of the loss incurred, "infinitely less than would have taken place in the ordinary course of events among so large a body of men," Mr. George Henty, the distinguished war correspondent of the *London Standard*, wrote a striking statement: "We have had," said he, "wet day after wet day with bitterly cold winds, and no change even of underclothing for a month; we have had no tobacco or alcoholics to enable the system to resist this wet and cold, and yet the hospitals are empty and the health of the troops perfect."

Like testimony was given by General Sir John Field, the leader of the advance brigade. On one occasion when the brigade halted for rest, making a special inspection of the regiments he discovered not a single man reported sick, and only one man disabled with a bruised foot. "No intoxicating drink of any kind reached the men, the mountain streams and a little tea was all that they could obtain to quench their thirst." Well could Sir John add with emphasis: "This was good evidence that strong drink was not needed to men in health, even when exposed to severe hardships."

* * *

THE PROBLEM OF SOLDIERS' WIVES

By E. L. TRANSEAU

A MEMBER of the British Parliament was recruiting for the army, urging the men to go to the front and fight for their country. "Will the government take care of my wife and children if I go?" asked one of his hearers.

"Certainly. The government will pay your wife a regular allowance, ample for her and the children," the member answered.

Thus assured, the man enlisted, went to the front, and in course of time was wounded. When sufficiently recovered he was allowed to return home. But he found it no longer a home.

With the generous allowance the government provided, his wife, like thousands of others in like circumstances, had sought solace in the companionship she found at the public house, taken to drinking, neglected her home and children, and when the wounded husband returned he found her a drunkard—and worse.

He went to the member of Parliament and reproached him for not looking after his family as he had promised. It was not enough to give her money, he declared. The government "should have built a trench around the public house."

This is a typical instance of what has repeatedly happened in England since the war broke out, except that not every husband went to his representative in Parliament and boldly denounced the government for permitting the

public house to seduce his wife. One infuriated man instead shot his wife for drunkenness and infidelity.

DRINKING AMONG BRITISH WOMEN

The number of hitherto respectable women in England who were led into drinking through grief and loneliness and the breaking of home restraints was appalling. The church and temperance societies made investigations and counted hundreds frequenting the public houses, often leaving their children to shiver in the cold outside. Long lines of women have been seen before the public houses waiting their turn to be served, kept in order by the police. As many as 38 children were counted at a time awaiting outside the return of their mothers, who are forbidden by law to take children inside the drinking places. Many of the women carried jugs and bottles which they had filled with liquor to drink at home.

Teachers complained of the deterioration of the children in the schools; police and magistrates called attention to the increase of juvenile crime.

The homes of these women were visited and found indescribably neglected, the children uncared for and abused. Infant mortality greatly increased. Quarreling and fighting in the neighborhoods were extreme. One street was called the "Dardanelles" because of the windows broken in this way.

The societies reporting these observations said they made no attack on the women succumbing to temptations to which they ought never to have been exposed; but they urged making an end to the existing conditions. They sent memorials to the authorities asking that the public houses be at least closed to women during the war. Counter attractions in the way of clubs, recreation rooms, concerts and social centers were instituted to furnish the needed social diversion.

But the lure of drink has not yet been removed, and until it is, now that its use has become established, other measures are of little avail.

CANADA'S EXPERIENCE

We are now learning that Canada has had an experience similar in kind though not in extent. At the recent convention of the Conference of Charities and Corrections harrowing descriptions were given of the drinking that broke out among the wives of some Canadian soldiers off at the front. With the drinking went the lowering of moral standards and neglect of children, and many soldiers have returned to Canada to find conditions similar to those already described in England, wives both drunken and unfaithful.

FRENCH HOME PROBLEMS

Similar conditions have arisen also in France. In fact, it has been suggested that the war allowance be withheld from some soldiers' wives who spend too much time in the drink shops.

"One of my correspondents from Marseilles," says M. Finot, "cites eighteen children abandoned by their mothers, who, thanks to the grants since the beginning of the war, have become victims of drunkenness and have finally abandoned their homes."

In *La Francaise*, edited by Mme. Misne, we read: "For many women there is but a single step from the little glass to misconduct. There are at present more than 500 of these women at the Nonne-Nouvelle prison, the police say. Most of them have been gathered up in 'bunches' at the camps; among them mothers of families, responsible for children, also, too many young girls. . . . And the fathers come back convalescent, pale, having hastened to spend a few days at home before returning to the front; but the home is empty, the mother 'under a cloud,' the children in an asylum."

A colonel in the department of Lower Seine is quoted by Prof. Albert Turpain of Poitiers University (*Eclair*, June 3, 1917) as believing that in that region the consumption of alcohol has doubled during the war and that this increase is almost wholly due to the women and children.

The women under 40 consume on an average half a pint of alcohol (spirits) a day. Above 40 years of age, the amount rapidly increases with the age. There is little drinking in the saloon which chiefly sells for off-consumption. Women necessarily can hardly give themselves up to drink except at home. Children from eight to fourteen years old drink daily from one-fourth to one-half a litre. Beginning at about fifteen years of age, the period of development, they drink less up to the time of returning from military service.

DRINK AT WORK AMONG FRENCH CHILDREN

The president of the French Woman's Suffrage Association at Rouen shows that the children, too, acquire a liking for alcohol at the hands of ignorant mothers, who share their drinks with their children.

Other children acquire it from their association with the soldiers around the military camps. At Rouen where British as well as French soldiers are forbidden to enter the cafes, they were reported as getting children to go for liquor for them. The young messengers are told to hide the bottles under their blouses and if anyone asks them what they have to say that it is wine.

One boy of eleven is on the police records of Rouen as having already acquired the drink habit. He is refractory at school, a thief and a truant, and when his mother was questioned about it she replied:

"It is quite likely. I do not know what he is doing. I cannot manage him. He is always around the British camp. Several nights he has not come home."

Another record is of a children's court where three children under thirteen were brought up for trial. One had stolen a quart of spirits from a delivery wagon and all three shared it. One was picked up dead drunk.

Another trio one evening attacked with knives a passer-by who had given them no provocation whatever. All three were drunk.

Earlier in the war reports came from Germany of a similar increase of hoodlumism and juvenile criminality among boys in their teens who drank and became unmanageable after the departure of their fathers.

In Russia, on the contrary, prohibition brought a decrease even of such hoodlumism as had previously existed.

In Brittany, M. Finot asserts, it is not at all uncommon to see children walking about intoxicated; groups of them meet and drink together.

It is an old adage that the tools of one generation become the toys of the next, and habits are equally subject to imitation. Children see more of drinking when the mothers indulge, and in the homes, than they do when the fathers drink away from home, in the cafés.

PRIMITIVE TEMPERANCE EDUCATION IN FRANCE

A sidelight on drinking conditions in France appears in a circular against alcohol issued by M. Paul Painlevé, Minister of Education in France, April 10, 1917. It also shows how far France has to travel before it can hope to even begin to check alcoholism.

"First of all," says M. Painlevé, "we can require that the child shall not drink alcohol during the hours he spends at school. This is why, after taking consultation, the Board of Public Instruction issued an order (July 17, 1916) that thenceforth no distilled liquor should be allowed in 'maternal' or primary schools. Even fermented drinks will be allowed only to children more than five years of age. Without condemning our scholars to a cold water regimen, I have at least proscribed a custom which in certain regions consisted in giving children hardly out of the cradle an unmentionable mixture of coffee and spirits. Those of our pupils who take the mid-day lunch to school will bring or receive only hygienic drinks [which in France means wine or beer, etc.] You will ask the school inspectors to carefully watch the carrying out of this order." (*Le Genevois*, April 12, 1917.)

"The state by no means discharges its obligations to the defenders of the nation by providing their wives with a certain sum of money," says M. Finot. "What will it say to the soldiers who, returning from the front, will demand the reason for the irreparable harm done their families?"

WILL AMERICA LEARN BY OBSERVATION OR EXPERIENCE?

There is probably not so much danger that large numbers of women will frequent drinking places in America. Public sentiment is more strongly against it than in England and France. But we have here already an enormous family trade in bottled liquors, especially in beer. The traffic that foresees the closing of the saloons has already made prodigious efforts to introduce alcoholic liquors into the homes to appeal to the women, and is already congratulating itself upon its success. But there will be some grief-distracted wives and mothers who will be tempted to turn to drink, especially in those circles where beer bottles in the ice chest are already an established custom and where every caller is offered the hospitable glass.

We have now been warned by the experience of England, Canada and France that we must provide something better than drink for the diversion of these women from their sorrow and loneliness when the time of separation comes. We must remove the danger of that false solace, and have organizations ready to turn their thoughts to helpful activity, which is one of the surest diversions, and to provide plenty of cheerful entertainment and healthful social opportunities.

NATIONAL RESPONSIBILITIES ENTAILED BY THE SELECTIVE DRAFT

MAJOR General William Harding Carter, U. S. A., believes that with the declaration of war with Germany, and the enactment of the selective draft law, we have assumed obligations whose ultimate end no man can foresee, says an editorial in the *St. Paul Medical Journal* (May, 1917). Primarily we have now become responsible for the preparation of hundreds of thousands of young men for the stern duties and hardships of war, and in the natural order of things, they will constitute the human element available for the nation's defense for many years to come. The nation owes it to the young men who are selected for military training to service that, from the very first they shall know that the training will be carried on under circumstances above reproach.

The public is far better advised today than ever before, concerning the effects of the habitual use of intoxicants in producing criminal, insane and untrustworthy men and women and degenerate children. Prisons, asylums and public reformatories furnish continuous and abundant evidence along these lines. Confronted with such facts as these we are about to undertake the creation of a large army of people, and to prepare it for participation in the most gigantic struggle in the history of wars.

That temperance has won a lasting victory is attested by the large increase in territory covered by prohibition laws and in the drastic regulations governing the employment of men in dangerous occupations, when individuals may be and often are responsible for the lives of others. If this applies in the operation of railroads and great industrial establishments, how much more should it apply in the cases of the officers and men called to the colors to uphold the honor of the nation and to defend its material interests.

Allen Rogers, of the American Chemical Society, in urging that alcoholic beverages must go, believes that the requirement is clear. Alcohol can fill liquor glasses and satisfy the willful appetite of thousands of Americans living comfortably at home—or it can be transferred to fill a hundred hospital needs—to save the lives or relieve the suffering of other thousands on the battlefield.

Alcohol can no longer satisfy the demands of the country's indulgence only. It must serve the thousands of industrial purposes that are the vital needs of America at war. And in war-time, everything must go that hampers the work of a successful mobilization of the country's resources and leads to final victory.

Instead of making alcohol for drinks, make it for manufacture of explosives, make it for ether and other medicinal purposes, make it for fuel, make it for dyes and shellacs, make it for every use to which chemists can put it in the supreme moment when all things must go to the melting pot to be turned to the nation's greatest good.

There is little room for discussion in a matter of this sort. If prohibition is necessary for the highest fighting efficiency of the soldiers and sailors of the United States, it is a measure which, standing on its own merits, calls for the loyal support of the entire medical profession.

* * *

OPPORTUNITIES FOR SERVICE—ABSTINENCE

THE Hygiene Reference Board of the Life Extension Institute includes a hundred or more of the strongest medical men of the United States, experts in their various departments, also representatives of practical philanthropy and industrial hygiene. Its monthly letter is submitted by the editor before publication to specialists on the board for review and criticism. Monthly letter No. 37 is devoted wholly to the subject of alcohol under the heading given above. Some paragraphs from the letter follow.

Now, that the question of national prohibition, or rather, food control as a war measure, is under serious consideration, the Life Extension Institute feels justified in setting forth the scientific facts that warrant such action and in urging upon the public the importance of anticipating governmental action and of making abstinence effective in the family as a matter of war-time service.

The chief reasons why this would be an important patriotic service are as follow:

1. An amount of grain is destroyed in making alcoholic beverages sufficient to supply 11,000,000 one-pound loaves of bread daily. This would be an enormous contribution to the food needs of the nation and of the allies.

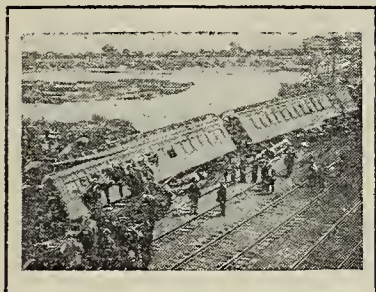
2. The weight of scientific evidence shows that even moderate indulgence in alcohol in its total effect on masses of men increases the death rate, lowers bodily efficiency and impairs the ability of the organism to resist disease.

The alleged food value of alcohol is not worth discussing. Such nutrients as some of the malt beverages contain are more economically secured in normal foods. A drug compound that exerts a poisonous effect on the body cannot properly be classed as a food.

The man who places a mere indulgence before the country's welfare, who, as between the flag and a bottle of beer, chooses the bottle, is not a glorious exhibition of patriotism at a time when the nation is arranging to send the flower of its manhood to a service of death. When men are preparing to sacrifice all that they hold most dear next to honor, when men are preparing to walk up to shell fire and face imminent death for their country, the man who continues to walk up to the bar and face slow death and physical inefficiency and assist in the waste of food supply for no cause except mere self-indulgence, will not shine in a heroic light.

If you have any spare cash, put it in the war loan or some other constructive expenditure and do not use it to injure the state and impair the defensive food-power and man-power of the nation.

RAILROADS NEED SOBER EMPLOYEES



WHY?

"Two Fingers of Red Liquor can Turn a Ten-Million-Dollar Safety Block Signal Into a Ten-Million-Dollar Waste of Money."

BAD ACCIDENTS



Three Happened Among Insured Drinkers to One Among All Insured Workers.

"A FRACTION OF A SECOND OFTEN MAKES ALL THE DIFFERENCE BETWEEN SAFETY AND SERIOUS INJURY"

**DRINK SLOWS
When Danger Demands Speed**

Drinkers' Wounds Heal More Slowly

Average Insured Men's Loss of Time by Wounds



Average Insured Drinkers' Loss of Time by Wounds



The Men Were All 25-34 Years Old, Members of Lelpsic Sick Benefit Societies. The Drinkers Were Chronic Users of Alcohol.

Drinkers Lost 372 Days for Every 100 Days Lost by Average Insured Men

"Alcohol Delays Healing and Repair in Accidents"

-WILLIAM J. BRICKLEY, M. D., Boston Relief Station.

HIT THE MARK



Twenty Skilled Marksmen Fired 17,000 Shots in 16 Days.

SHOOTING WAS POORER BY 3 TO 10 POINTS IN 100 HALF HOUR AFTER TAKING ALCOHOLIC DRINK EQUAL TO TWO PINTS OF BEER

Drink Impairs Skill

FOUR OF SEVEN NEW SCIENTIFIC TEMPERANCE POSTERS BEING USED IN RHODE ISLAND AND OTHER CAMPAIGNS; IN INDUSTRIAL PLANTS, ETC.

—Copyrighted, 1917, by the Scientific Temperance Federation.

MAKE THE TRUTH KNOWN

TWO facts stand out clearly as a result of the intense campaign for war prohibition of the past four months.

The first and most conspicuous is the power and determination of the organized liquor traffic which, in the United States as in Great Britain and France, and other countries, has doggedly fought every measure for the genuine limitation or abolition of its business. Increased taxation has been submitted to in the knowledge that its cost would be passed on to the drinker, but every effort to stop the manufacture or sale of intoxicants for the sake of saving food or man-power has met the resistance of a traffic which is fighting solely for the retention of the financial interests involved.

The second fact which appears is the need for still further education of the people concerning alcohol. When a Senator from the state of Massachusetts can assert on the floor of the United States Senate that "beer is an innocent drink," there is need for education in high places.

When a labor leader of local importance and some national reputation, member of the school board of the city of Boston, asserts that abstainers have more sickness in sick benefit societies, that drinkers as a class live longer than abstainers, there is need for education among our workingmen.

When a lawyer, candidate for state Governor, reveals such ignorance of the method by which alcoholic liquors are produced as to assert that the protein in grain is actually increased in beer-making (see page 190), there is need for education in political and professional circles.

The truth is that while public intelligence concerning alcoholic liquors is at a very much higher level than ever before, and each of the gentlemen named would not have felt complimented at popular comment on his statement, such knowledge has not yet become sufficiently common property of thousands of even many men and women in positions of leadership. Ignorance must still further give way to knowledge, and knowledge to conviction before we can expect the thorough uprooting of the alcohol evil.

For these reasons the editors of the JOURNAL take special satisfaction in bringing to its readers this month four articles on new but tried educational methods for reaching all the people with the facts about alcohol. In some or all of them we are confident our readers will find suggestions applicable to their own fields of work.

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TWO GREAT HUMAN LOSSES

TEMPORARILY, the attention of the United States has turned largely to the food loss through drink rather than to the man loss, which, heretofore, has received the more emphasis. Striking facts concerning this food loss are presented in a summary elsewhere in the JOURNAL. For years the liquor interests have related tales of their enormous value to the farmer in using farm products. When the tables were turned,

and the people began to expose the extent of diversion of foods into the manufacture of liquor, there was a ludicrous scurrying to cover and frantic efforts to show, just what the anti-alcohol forces had been showing for years, the relatively small amounts of grain used by brewers and distillers when compared with the total production. But the amount of the relatively small looms large actually when the world is crying for bread, and when the world's history may be decided by the food supply.

The battle for saving foodstuffs by abolishing liquor has already had one definite result. Never again will it be possible for the liquor manufacturers of the United States to make capital of their economic benefit to the farmer, since the truth of the whole situation has now been revealed.

Great as is the loss of food in liquor-making, the most serious loss is that of man-power as the result of liquor drinking. The two great losses are inseparable as arguments for the abolition of the liquor habit and the liquor traffic.

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FAIR PLAY FOR THE WOMEN

IN the effort to save wine and beer from prohibition much has been said of the importance of having "the enthusiastic co-operation" of all classes in winning the war, and of the fear that this might be "chilled" if beer and wine were prohibited.

It is proper to inquire whether sufficient thought has been given to keeping the "enthusiastic co-operation" of the women of the nation without whose aid it is admitted food conservation cannot be successful.

Here is the situation. The women are asked to give their men for military service, their money for war loans, their co-operation in food saving. All this they will give, but can the government expect "enthusiastic co-operation" if it continues to allow eleven times as much grain to go into liquor as they are asking the women to conserve by "saving a slice of bread a day," and to allow the manufacture and sale of liquor that takes money out of the home needed for food and other necessities and spoils the lives of hundreds of thousands of men?

The women will continue to give men and money and economy. As a rule it is not they who are the drinkers in the United States. Is it too much to ask that if the government really wants the "enthusiastic co-operation of all classes," it will protect the men against drink spoliation, make possible the saving of money now spent for liquor, save all foodstuffs now going into alcoholic beverages?

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UNITED STATES LIQUOR CONSUMPTION DECREASING

A STEADY decrease in the United States drink bill is shown by the annual estimate sheet issued by the *American Grocer* (July 4, 1917). The per capita consumption for the year ending June 30, 1916, was 19.40 gallons, the smallest since 1902, a decrease since 1914 of 3.10 gallons and since 1911 of 3.39 gallons. The total drink bill for the year ending June

30, 1916, was \$1,635,048,034, a decrease of \$36,495,290 from that of 1915. Since 1912 the per capita consumption of spirits, wine and beer all decreased as shown by the following table:

	SPIRITS	WINES	BEER	TOTAL
1912	1.44 gals.	0.58 gals.	19.96 gals.	21.98 gals.
1916	1.35 "	0.46 "	17.59 "	19.40 "
Decrease	0.09 "	0.12 "	2.37 "	2.58 "
Average three years, 1914, 1915, 1916.....	1.34 "	0.43 "	18.79 "	20.57 "

American Grocer calls attention to the cost of alcoholic liquors, \$1,635,-048,034, plus non-alcoholic drinks (tea, coffee, cocoa), \$265,019,027, a total of \$1,900,067,061, as "about the amount of the Liberty loan," and asks if the race would suffer if every gallon of alcoholic beverage was done away with. "With a review of the cost of drink there comes a revelation of the expense of self-indulgence, waste, more or less of woe, and a lamentable lack of wisdom. Is not this at the bottom of laws forbidding the manufacture of spirituous liquors?" The context shows the writer means alcoholic liquors, not spirits only.

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ALCOHOLISM IN THE OCCUPATIONS

OFFICIALS of the New York Health Department have lately reported a study of the death rates from ten causes in eleven different occupations. (*U. S. Public Health Reports*, June 8, 1917.)

Tuberculosis stands at the head in all of the occupations in causing the largest percentage of deaths, but the different trades vary greatly in their proportion of deaths due to this cause.

Sixteen deaths out of every hundred due to tuberculosis is the average record for all occupations counting persons over fifteen years of age.

Curiously, teamsters have the highest death rate from this cause (35 per cent), more than double the average and exceeding such other occupations as printing (33 per cent) and clerks, bookkeepers and office assistants who, subjected to indoor life, have always been found to afford conditions favorable to tuberculosis.

But the teamster has an out-door life. True, he is subjected to exposure, and this is undoubtedly one of the factors in his high tuberculosis mortality rate. But the investigators place alcoholism next as probable explanation of the conditions.

Several circumstances showed that alcoholism is prevalent in this occupation. In the first place, nearly 3 per cent of all deaths among teamsters were due directly to drink. Secondly, in the later age groups there was a high death rate from diseases in which alcohol is a prominent factor. It was found also that in the case of tuberculosis itself alcohol was a complicating cause in many of the deaths. All these facts went to show that alcohol probably played a considerable part in the high tuberculosis death rate among teamsters.

The reason for this, the investigators found, first, in the frequent opportunities for drinking afforded teamsters by the numerous drinking places, and, second, "in the prevalent false idea that alcohol is beneficial to persons who have been exposed to cold. . . .

"If drivers, teamsters and others engaged in similar occupations could be made to understand that alcohol lowers instead of raising body temperature and could be taught to substitute hot coffee or soup for their whisky when they felt chilled, the mortality of this group would be very materially reduced, not only from alcoholism and the diseases directly dependent upon it, but also from tuberculosis, pneumonia and accidents."

Garment workers do not approach the other indoor occupations in the frequency of tuberculosis due probably, the authors think, to the racial immunity of the Jews.

Next in tuberculosis death rate comes the class of "laborers" (unskilled laborers in many industries). As to the reason "perhaps the most important is that in this group are to be found all the misfits who have failed to make good in the other occupations because of drunkenness, carelessness, or ill health, and these 'laborers' had next to the highest death rate from alcoholism."

In the list of deaths from alcoholism, saloonkeepers and bartenders stand at the head; in suicides, they stand second only to cigar-makers and tobacco workers.

While recognizing the probable influence of alcohol in contributing to suicide, the authors are inclined to give a place here to nationality. They say, "It is our opinion that a large percentage of those engaged in the selling of liquor are Germans, and the statistics of the city show that the mortality of Germans from suicide is higher than that of any other nationality."

It is not safe to draw too many conclusions from an occupational study of the relation of alcohol to mortality as so many factors, sex, age, nationality, etc., manifestly have an influence.

It is interesting, however, to note that the trade whose promoters have the most to say about drinking for enjoyment and for increasing the joys of life, should furnish so large a percentage of those who find life intolerable.

UNIVERSITY DRINK TRADITIONS GOING

FOR many years there has been a certain amount of protest among New England University Alumni at the retention of the free provision of drink at reunions and in connection with class social functions. The vote has run close in several Harvard undergraduate classes. Yale, through the college and scientific school senior classes, has finally broken with tradition by votes not to have liquor at the class banquet this year and to bar it from all future reunions. Several classes of earlier years agreed to take the same course at their reunions.

A committee of 71 prominent Yale men beginning with the class of 1868 and extending down to and including the class of 1917 sent out a letter to 21,500 Yale alumnae. It was signed by William H. Taft, ex-President of the United States, and with a patriotic appeal to the spirit of preparedness asked for an expression of opinion in the two following questions:

1. Should class reunion funds be expended for liquor?
2. Should liquor be served at reunion headquarters?

The answers were as follows:

1. Yes, 220; no, 8,213.
2. Yes, 593; no, 7,796.

"In these days of readjustment," says the report, "this shows how 8,439 Yale graduates have already lined up on this patriotic move."

Meanwhile, on April 17, the Corporation of Yale University voted to recommend to class committees that the serving of intoxicating liquors at reunion headquarters this June be dispensed with.

Harvard pressed in the same direction. A letter to the *Harvard Crimson*, April 30, by Charles Parker Reynolds, '18, urged the conservation and patriotic reasons for national prohibition. "In military training Harvard has maintained a lead over other colleges of which we are justly proud. But concerning the movement for conservation of food and national efficiency we have heard nothing. It is high time the *Crimson* and Harvard College took a stand on national prohibition as a war measure."

The *Crimson* met this challenge with two editorials, May 8 and 10, the first urging war prohibition as a law of necessity in conserving food supplies; the second for the conservation of man-power and efficiency. "We have no time now for abstruse arguments on individual license when the safety of the nation itself hangs on our abstinence and conservation. We are dealing with necessities decreed by Germany. Our grain must be conserved. Our resources in man-power must be kept to the keener point of efficiency. That is the inevitable truth."

Letters from alumni not only favoring war prohibition but the abolition of drink from Harvard clubs and reunions appeared in the *Harvard Alumni Bulletin*.

The following letter signed by Howard Elliott, president of the Harvard Alumni Association and until recently president of the New York, New Haven & Hartford Railroad, and Roger Pierce, general secretary, was sent to the secretaries of the college classes:

Several prominent graduates have expressed to the Harvard Alumni Association, the hope—in view of the nation-wide movement for prohibition in times of war—that no liquor will be paid for out of class funds at the celebration in June; and further that no liquor will be served in the classrooms on Commencement Day.

This is not a matter in which the Alumni Association has authority to act, nor desires to recommend, as the decision must be made by each class. There is, however, so much interest in the subject among Harvard graduates, that we are venturing to suggest it as a matter deserving consideration by each class for such action as they may desire to take.

As one result of the agitation, Harvard Class Day, probably for the first time, was a non-alcoholic function.

The Harvard Graduate Schools Society circulated a petition to President Wilson in behalf of war prohibition. Several hundred undergraduates also signed such a petition.

The following paragraphs from university periodicals illustrate the vigorous thinking on the alcohol question which is going on in two old and conservative American universities:

THE weakest part of the Harvard Clubs, as a general proposition, is their attitude of not only tolerating but even encouraging the use of strong drinks. Witness their palatial bars. Shall organized Harvard men, because of their personal amusement hinder through inaction a movement which aims at nothing less than the physical, mental, moral and spiritual upbuilding of present and future mankind?—Gordon W. Walker, '07, in *Harvard Alumni Bulletin*, May 17, 1917.

IF the United States is to be prepared against any emergency, we of the younger generations have got to do our bit by fully realizing the responsibilities of citizenship which Yale has given us and expects us to live up to. The adoption of prohibition for reunions may be considered an important step in national preparedness because it means the recognition by men who are and must become leaders, of the fact that there is one tremendous element in our modern life which is on the whole so unpreparing and so non-essential that it would be better off if put out of the way.—W. E. Swift, '15, in *Yale Daily News*, March 19, 1917.

WITHOUT attempting to catalog the moral, economical or financial grounds of the question the *Sheffield Monthly*, guided by its own individual opinion, casts its vote for "dry" class functions.—Editorial Staff, *Sheffield Monthly* (Yale), April, 1917.

THESE six billion annual pounds (of foodstuffs used in drink) may mean the difference to our nation between sufficiency and want. They may mean to our cause the difference between justification and defeat.

There is no time to argue concerning the deified and immemorial right of men to get drunk when they want. There is no time to rant about the freedom of the individual.

We can allow no waste. We must have war prohibition. There can be no wise question upon that.—Editorial, *Harvard Crimson*, May 8, 1917.

Meanwhile, in the newer West, the university men looking toward service in the war strike a fine high note.

Clean hands and lives offered without rancor for a clean cause—this, in effect, is the formula of service to their country adopted by the engineering students of the University of Minnesota, says the *Minneapolis Journal*.

Here is their code:

First—We stand to respond to the call of the country in ready and willing service.

Second—We undertake to maintain our part of the war free from hatred, brutality or graft, true to American purpose and ideals.

Third—*Aware of the temptations incident to camp life and of the moral and social wreckage involved, we covenant together as college men to live the clean life and to seek to establish the American uniform as a symbol and guarantee of real manhood.*

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WHAT THE LIFE INSURANCE APPLICANT FACES

MUCH has been said about the conclusions of life insurance companies as to the greater mortality among drinkers, the better life chances of the abstainer. There is another practical aspect of the question less often considered—the possibility that the drinker may impair his chances of getting life insurance at all. The man who desires to protect his family and perhaps his business interests by insurance often has to run a gauntlet of questions today as to his drink habit as rigorous as those relating to general health.

The questions asked on this point on many insurance application blanks are suggestive not only as to the desirability of sobriety as a preparation for securing insurance, but as an indication of the fact that we are getting away from old loose divisions between “moderate drinking” and “excess.” While there are exceptions, many of the insurance companies prefer to make their own definitions of these terms and to this end insist that their applicants shall state as exactly as possible just how much and when and what they have been in the habit of drinking prior to application.

An examination of application blanks of eight of the large insurance companies reveal the following questions. The roman numeral indicates the questions of each company.

I.

What is your present use of wines, spirits or malt liquors? (*State amount and kind used and whether daily. The word “moderate” or its equivalent will not be accepted.*)

To what extent have you used them during the past five years? (*Give particulars.*)

Have you used them to intoxication during the past five years? (*If so, state when and how often.*)

Have you ever used opium, morphine, cocaine or chloral, or have you ever been in any sanatorium or taken treatment for alcohol or narcotics? (*If so, state when and how often.*) This question in some form or other appears in substance on all the blanks and is not quoted again.

For the Medical Examiner. Is applicant's appearance that of a healthy person? Do you from your observation of or acquaintance with the applicant regard the answer to question No. — as fully and correctly setting forth party's habits in the use of liquor or narcotics?

II.

Do you use wine, spirits or malt liquors?

What is your daily consumption? (Give kind.)

What has it been in the past? Have you ever used them to excess?

If a teetotaler, how long have you been so?

Are you now, or ever have you been, connected directly or indirectly with the manufacture or sale of intoxicating liquors?

For the Medical Examiner. In the matter of indulgence in alcoholics, report specifically *what* the candidate drinks and how much. Such phrases as "temperate," "moderate," "drinks when he wants to," give us no information and are worthless for the purpose of the report.

III.

Do you use beer, wine or other alcoholic stimulants daily? If not daily, how often? What is used and how much?

What have your past habits been in this respect?

Have you ever used any of them to excess?

IV.

For the Medical Examiner. What are the applicant's present habits as to use of wines, spirits or malt liquors?

If he uses them regularly, state amount and form of daily consumption.

What are his past habits as to use of wines, spirits and malt liquors?

Has he ever used them to excess?

V.

Are you now or have you ever been engaged in any way in the sale or manufacture of beer, wine or other intoxicating liquors? (Answer yes or no.)

Have you used wines, spirits or malt liquors during the past year?

If so, what has been your daily average in past year?

How much have you used in any one day at the most?

Have you been intoxicated during the past five years?

If a total abstainer, how long have you been so?

It is understood and agreed that during the period of one year following the date of issue of the policy of insurance for which application is hereby made, (a) the risk of death will not be covered by the policy if such death occur by own act whether sane or insane, (b) I will not engage in any of the following *extra-hazardous occupations or employments; retailing intoxicating liquors* (italics supplied), handling electric wires or dynamos, blasting, mining, submarine labor, aeronautic ascensions, the manufacture of highly

explosive substances, service upon any railroad train or track or in switching or coupling cars, or in any steam or other vessel, unless written permission is expressly granted by the company.

For the Medical Examiner. Have you any suspicion that the applicant now uses or ever has used wine, spirits or malt liquors in otherwise than a strictly temperate manner?

VI.

If you use wine, spirits or malt liquors or other alcoholic beverages, state kind used and how much in any one day at the most.

How frequently do you use the amount stated? If you use any of them daily, weekly or monthly, state kind and average for the past two years.

Have you used any of them to the extent of intoxication during the past ten years? (*If so, give circumstances and dates.*)

If a total abstainer, how long have you been so?

Are you now or have you ever been engaged either directly or indirectly in the sale or manufacture of malt or other spirituous beverages?

For the Medical Examiner. The answer to this question must be definite and convey a clear idea as to the past and present habits of the applicant in the use of stimulants. Such answers as "moderately," "temperately," or "not to excess" and the like will not be accepted. If there is a history of over-indulgence or a free use of stimulants, a full explanation will be required over the signature of the applicant.

Have you any reason to suspect unacknowledged over-indulgence in or free use of stimulants now or in the past?

VII.

Have you ever taken any "cure" for the liquor or drug habit? If the answer is "yes," state when, where, and for what.

To what extent do you now use spirituous, malt or other intoxicating liquors?

To what extent have you used them in the past?

State kind of liquor used, frequency and quantity.

Have you ever used any of them to excess?

For the Agent. Are you sufficiently acquainted with the applicant to vouch for his habits regarding the use of liquor?

What were the applicant's habits formerly? How are they now?

If not sufficiently acquainted, make inquiries regarding the applicant's occupation and habits and state what you have ascertained and source of information.

VIII.

What is your average daily consumption of alcoholic beverages?

Have you used them to the extent of intoxication during the past five years?

Are you now or have you ever been either directly or indirectly concerned in the manufacture or sale of any kind of alcoholic beverage?

For the Medical Examiner. Do you know or suspect that the applicant ever has or now uses alcoholic beverages to excess or any narcotic?

THE WORLD ALCOHOL PROBLEM

DENMARK

DENMARK has prohibited the manufacture of spirits throughout the country to save foodstuffs. The beneficent results of three weeks' prohibition in March of the manufacture and sale of spirits were convincing to thousands of former opponents of prohibition. Beginning March 21, all further manufacture of spirits was prohibited. On March 25, the sale was resumed for a short time to give the liquor dealers a chance to dispose of the stock they had on hand. Prices were more than doubled, the government tax on retail prices increased 100 per cent and saloons were compelled to close two hours earlier.

The *International Record* (July, 1917) states that a petition is now being extensively signed by voters asking for prohibition also of the manufacture of beer, the continuance of all restrictions in the sale of alcohol, and immediately after the war a national plebiscite on the question of total prohibition.

FRANCE

THE prohibition of absinthe in France closed 464 retail selling places and 21 wholesale shops, according to a recent statement of the Minister of Finances.

BELGIUM

THE Belgian government has appointed a commission, of which Prime Minister Emile Vandervelde is chairman, to study the alcohol question. The commission, according to *Independence Belge* (May 21, 1917), is to make suggestions to the government tending to co-ordinate and complete the measures taken against alcoholism in the territory occupied by the Belgian troops with a view to their progressive application to the regions of Belgium as they are freed from occupation. It will not only consider the suppressing of the manufacture and sale of spirits, but also the allied matters of public finance, commerce, agriculture and industry. *L'Independence Belge* thinks it a fine program, but that as the present regime applies to only a small section of Belgium, the rest of the country may want to say something about the adoption of such a program.

FINLAND

PROHIBITION in Finland was sanctioned May 29, 1917. A Finnish prohibitory act twice failed in years past because the Czar, as Grand Duke of Finland, withheld his approval of the law by the Finnish Parliament. This prohibits all alcoholic drinks except weak beer, according to *L'Abstinence* (June 16, 1917).

NORWAY

THE Norwegian government, by a special measure adopted by Parliament, is granted permission in special circumstances such as war, internal troubles, etc., to limit or absolutely prohibit the sale of all alcoholic drinks, also their importation and sale in the country. The limitation

or prohibition can be either applied to a single town, or larger districts, or the entire country. Using these powers, the government has now extended for an infinite period prohibition of the sale of spirits and also of wine containing more than 15 per cent of alcohol (*L'Abstinence*, June 16, 1917). It seems likely that this prohibition will remain in effect at least until the end of the war, if not finally.

SWEDEN

THE Swedish Parliament discussed for several days the question of temporary prohibition in view of the serious lack of food supplies. The lower house unanimously declared for temporary prohibition. The upper house defeated it by a vote of 72 to 60. The small majority in the upper house which has always been conservative on the alcohol question indicates that the idea is gaining ground and that if the situation becomes still more serious the proposition may be adopted.

ICELAND

TOTAL prohibition went into effect January 1, 1915. While operation has revealed some defects in the law, the results have been more favorable than the people dared hope. Especially has this appeared in the savings bank accounts. The average annual deposits from 1904 to 1912 were 600,000 crowns. In 1912 prohibition of importation of liquors went into effect. At the end of 1914 the amount in savings banks was 8,900,000 crowns. During the first year of prohibition, the net deposits increased 4,200,000 crowns. On December 31, 1916, there were in the banks about 21,000,000 crowns, outside the money deposited in merely local banks.

Indride Einarsson, chief of the Iceland Bureau of Statistics, while recognizing the influence of the war in increasing deposits, believes that the principal cause must be prohibition. Since Iceland has a population of only 90,000 persons, savings deposits of nearly \$5,500,000 are exceedingly creditable. They expect that by 1920 this amount will at least be doubled, and that these savings will be of immense importance in developing the natural sources of Iceland.

RUSSIA

THE Russian Minister, Kerensky, issued in May an order addressed to the soldiers warning them of the grave dangers in using alcohol. They were forbidden to touch any stocks of alcohol they might discover, on the ground, according to *Le Temps* (May 31, 1917), that if Russia should return to alcohol, excesses would increase. The Minister asked both soldiers and officers to resist the consumption of vodka by anyone whatever.

The provisional government is said to have decided on the following measures:

1. Prohibition throughout Russia of all alcoholic liquors containing more than 1½ per cent of alcohol.
2. Exportation of wine and other alcoholic drinks is permitted.
3. In the wine-producing districts the sale of wine containing not more

than 12 per cent of alcohol is permitted, but only in the cities and communal authorities may prohibit it.

In prohibiting the sale of beer, according to *L'Evangile de Liberte* (May 26, 1917), the order goes a step further than that of the Duma, June 30, 1916.

GERMANY

GERMAN women met recently in Berlin, *Der Tageblatt* reports, to study the question of morality, and the interest aroused led to the calling of another conference of women in Dresden to consider the relation of the alcohol question to new Germany, particularly in its bearings upon public health, economics, education and morality.

GREAT BRITAIN

THE *British Weekly*, credited with having the largest circulation of any religious paper in the world, has come out strongly for prohibition as the only remedy for the drink evil.

The editor has come to this position, according to the *Vanguard* (May, 1917), in the midst of the discussion of "state purchase" and all the other proposals for dealing with the evil which is freely named "the nation's deadliest curse." The editor charges that the liquor traffic is threatening the very life of the British Empire and that prohibition is the only reasonable solution.

PRESIDING at a great war-time prohibition meeting in the Albert Hall, London, May 19, the Right Hon. Donald Maclean, M. P., deputy chairman of the House of Commons, made the astounding statement that since the war began Great Britain has spent over 512 millions of pounds in drink.

"There has been enough sugar used in the manufacture of drink to carry us from May to January," said Mr. Maclean. "Enough cereals have been destroyed to give this nation a food supply on rations from the beginning of this month till the middle of March, next year. We have in cash spent on it enough to finance the whole war for six months, and in food supplies we have destroyed enough to carry us safely and triumphantly through all the real months of crisis that lay before us still."

THE Bishop of London said that it was solemn hypocrisy to be reading the King's proclamation in the church every Sunday—if we were not going to live up to it—if every poor housewife was exhorted to save every crumb and then hundreds of thousands of tons of food was turned into beer and spirits. The poor widow was unable to get sugar, but saw cartloads of sugar going into the brewery. "I say to the House of Lords, 'If you want a revolution go on with that,'" said the Bishop.

MR. BEN TURNER, secretary of the Yorkshire Federation of Trades Councils, telegraphed: "Prohibit all foodstuffs being used for intoxicants, useless pleasures and dangerous vices. Feed the people at all costs or revolution is possible."

MR. D. J. WILLIAMS, miners' agent, Western Miners' Federation, sent the following message: "Glad that you and others are frustrating the unworthy efforts of those who are endeavoring to stigmatize the workers of this

country. Let Mr. Lloyd George and others of similar opinions say whatever they like, I am certain that they do not represent the real feelings and opinion of the workers of this country. So, work in the faith that a great majority of the workmen are behind you."

SWITZERLAND

SWITZERLAND views with concern the possibility that her food resources, already low, will be reduced still further by embargoes placed by the United States upon the exportation of foodstuffs to the neutral countries which, to get iron and coal from Germany (as they cannot be supplied by the allies), are compelled by Germany to give foodstuffs in return. The temperance organizations sensing the loss of foodstuffs in the manufacture of liquors are circulating a petition asking the Federal Council to prohibit the use of rice in breweries; to requisition the barley and rye stored at the breweries and to reduce the quantity of beer to be manufactured; to reduce to the minimum the allotment of sugar allowed liquor manufacturers, wine merchants and producers; to forbid distillers to buy up the fruit crops as they did in certain sections in 1916; to limit the distillation of fruits, and to develop non-alcoholic methods of utilizing them; to prohibit the importation of alcoholic liquors, as the railroads are unequal to transporting the foodstuffs that must be imported. Up to June 18, the petition had received 330,398 signatures of persons 20 years old and upwards. Of these 145,720 were voters.

AUSTRALASIA

EVERY Australian state except Queensland and West Australia has voted to close the saloons at 6 o'clock in the evening for the duration of the war and sometime afterwards. South Australia and Tasmania have voted to make this permanent. According to statistics obtained from the Collector of Customs (*The Vanguard*, April 21, 1917), during the six months before early closing came into effect, duty was paid in New South Wales on 12,277,680 gallons of beer and 609,789 gallons of spirits. In the six months after early closing came into effect, there was a decrease of 606,000 gallons of beer and 174,738 gallons of spirits. It is estimated that this decrease meant a saving to the consumer of about \$3,000,000 for the six months.

DRUGGISTS' LICENSES DECREASE IN MASSACHUSETTS

THE diminution of the popular idea that alcohol is necessary medically is perhaps reflected in Massachusetts statistics of druggists' liquor licenses. In 1911 there were 99 towns and cities which granted a total of 1,022 druggists' licenses. In 1916 there were 85 towns and cities with a total of 889 druggists' licenses, a net decrease of 14 communities, and of 133 druggists' licenses.

Not the least interesting part of these statistics compiled by Mr. Robert H. Magwood, of the Massachusetts Anti-Saloon League, is the fact that in the cities licensing the general sale of liquors the number of druggists' licenses actually increased by 30 during this period, whereas the number of no-license towns and cities granting druggists' licenses in 1916 had decreased from 41 to 24, involving a loss of 163 licenses of this class.

THE MEDICAL VIEWPOINT

EMBRYONIC DEVELOPMENT INJURED BY ALCOHOL

THE eggs of the minnow, *fundulus*, are susceptible to 2 to 5 per cent solutions of alcohol, according to William Gee (*Biological Bulletin*, December, 1916). They cleave irregularly and the resulting individuals are largely defective, often monsters of specific types. Weak doses of alcohol tend to injure spermatozoa without preventing fertilization. Longer action tends to kill the weaker sperm, letting the stronger survive.

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WHERE PARENTAL ALCOHOLISM SHOWS ITSELF IN NERVOUS DISORDERS

THE judges in the police courts see more of the consequences of inherited alcohol taints than the physician, in the judgment of Dr. J. W. Lange-laan, of Amsterdam, Holland (*Nederlandsch Tijdschrift voor Geneeskunde*, April 21, 1917).

The evil consequences of alcoholism in the parents, he thinks, do not appear usually until about the age of puberty, and are then mostly in the mental sphere. Syphilis kills more children early in life.

In his review of 1,112 cases of nervous diseases, he regards alcohol as a main factor in nervous disorders, ranking next to syphilis and disorder of the thyroid gland. Alcoholic indulgence is, of course, often a preliminary to syphilis, and Langelaan thinks that alcoholism or tuberculosis in the parents is responsible for an inherited inferiority in the thyroid.

Among other bases for his conclusion as to the relation of alcohol to nervous breakdown is the "enormous consumption of alcohol" in Holland.—Reported in *Journal of the American Medical Association*, July 7, 1917.

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PHYSICIANS CONDEMN ALCOHOL AS A STIMULANT

HOW greatly medical opinion regarding the place of alcohol in the therapeutic armamentarium has changed in recent years may be seen from the following resolution adopted by the House of Delegates at the recent annual meeting of the American Medical Association:

Whereas, We believe that the use of alcohol is detrimental to the human economy, and whereas, its use in therapeutics as a tonic or stimulant or for food has no scientific value; therefore,

Be It Resolved, That the American Medical Association is opposed to the use of alcohol as a beverage; and,

Be It Further Resolved, That the use of alcohol as a therapeutic agent should be further discouraged.

It is true that the resolution was not adopted without opposition. Most of this, however, took the form of objections to the consideration of the

question by the House of Delegates, "which," it was declared, "was no place to settle questions of science." A large majority of the delegates were out and out against the use of alcohol as a beverage, but they differed as to whether there were not some cases in which a physician could use it to advantage. After considerable discussion, the resolutions printed above were adopted by a substantial majority.—N. Y. City Department of Health *Weekly Bulletin*, June 16, 1917.

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NOT EVEN A RESPIRATORY STIMULANT

IN a critical review of the evidence concerning the action of alcohol as a stimulant made for the Committee of Fifty in 1897 and 1908 (published 1903) Dr. J. J. Abel, of Johns Hopkins University, reached the conclusion that alcohol is not a stimulant to the circulation.

In the matter of respiration, however, he judged that it was a moderate stimulant, inasmuch as "it causes an increase in the volume of air passing through the lungs and in the absorption of oxygen."

During the score of years that have passed since, more has been learned about the process of respiration, and the volume of air passing in and out is not now taken as the measure of lung "ventilation." An increase in the rate of respiration may go on without increasing the amount of air that gets beyond the "dead space" in the lungs, and it is only the air that reaches into the tissues and cells beyond that accomplishes the ventilation, the exchange of gases which is the purpose of respiration.

A new study of the action of alcohol upon respiration has just been reported from the Boston Nutrition Laboratory of the Carnegie Institution of Washington in which all available knowledge up to the present time was utilized. Alcohol was not found to be a respiratory stimulant.

The study was experimental, performed with a large number of subjects, and with every precaution for making the alcohol and the non-alcohol tests exactly comparable.

The report, made by Harold L. Higgins in the *Journal of Pharmacology and Experimental Therapeutics* (May, 1917), contains the following account of the findings:

Having analyzed the factors which tend to affect the respiration after alcohol it now seems desirable to consider how they combine to affect the total respiratory ventilation of the lungs per minute, especially as this has been in a considerable part of the previous work almost the only criterion of whether or not alcohol was a respiratory stimulant.

In alcohol experiments there was a diminution in fifteen cases, no change in eight, and an increase in six. From this it would appear that alcohol should be called a respiratory depressant rather than a respiratory stimulant.

When there was an increased ventilation after alcohol it was accompanied by and caused in large part by an increased rate of respiration; this explains the increase with subject B and to some extent with subject D.

The diminished ventilation after alcohol is almost wholly due to the lessened carbon dioxide production.

Neither the increase in the sensitivity of the respiratory center shown in several experiments, nor the large dead space shown in one experiment were sufficient to make lung ventilation higher than in the preliminary period.

These experiments differ markedly from previous work, in that here it seems to be the rule for the ventilation to diminish after alcohol, while other workers have reported an increase in the ventilation.

This may, perhaps, be explained on the ground that in other experiments the factors of an increased respiration rate and an increased activity leading to increased carbon-dioxide production (especially from restlessness) may have been overlooked. Thus if a change in the "total respiratory ventilation" is to be taken as the criterion of respiratory stimulation or depression, it appears that alcohol in doses of 30 and 45 cc. given to men, breakfastless, reclining and quiet, usually acts as a respiratory depressant. The depressing action, however, is indirect.

This adds another count to the evidence already practically conclusive that alcohol is not the "stimulant" it was so long supposed to be, but is instead a depressant.

* * *

HEALTH DEPARTMENTS AND THE ALCOHOL QUESTION

THE community has a right to expect the doctors and the health departments to give the facts, together with sound and reliable opinions.

It is quite important that the public should be correctly informed as to the effects of alcohol as it is that they should know the facts about tuberculosis and syphilis.

The amount of alcohol in patent medicines should be generally known.

We know now that alcohol is not a stimulant, but is a depressant; that its excessive use frequently causes insanity; that used even in moderation it more or less impairs the nervous system so that impressions are less clear and actions less accurate, thus causing innumerable accidents to the individuals and other innocent persons.

Alcohol causes damage to the heart, kidneys and blood vessels, as well as to the stomach and liver. Owing to its effect on the germ plasma it often damages the unborn babe. It reduces the resistance to bacterial infection, thus rendering individuals more susceptible to tuberculosis and other infections. Regular drinkers have a decidedly smaller chance of recovering from pneumonia.

The more we know about disease the more clearly we see that preventive medicine is most important for human welfare; for, suppose a part of the body has been impaired or destroyed by syphilis or alcohol—such destruction might have been prevented, but usually cannot be repaired.—*Mass. Public Health Bulletin*, May, 1917.

CONSOLE AND CONSOLATION

ALCOHOL has certain definite uses in the treatment of disease, though it is by no means indispensable, says Bernard Fantus, M. D., Professor of Pharmacology and Therapeutics, University of Illinois (*Jour. of the Amer. Med. Assn.*, July 7, 1917). In the hands of the people, it is a dangerous habit-producing narcotic. The medical profession, well knowing its evil effects, cannot but ally itself with its enemies. Should humanity be deprived of liquor, it will have lost a consoler, but will have far less need for consolation. Alcohol may afford man a sense of well-being, but it certainly does not contribute to the welfare of the human race.

* * *

ANOTHER WINE STRONGHOLD GONE

ONE of the old notions in behalf of wine was that it rendered impure water harmless. French scientists showed some time ago that such protective action as it exerted was due to the acids and not to the alcohol. General Gallieni, as the result of long experience, said that even bad water is better than the use of wine. There will be no occasion for the American army to adopt the wine régime as it goes to France, as water can be treated with calcium hypochlorite to destroy disease germs. Dr. Charles H. Mayo said in his presidential address to the American Medical Association (*Jour. A. M. A.*, June 9, 1917):

Now that we know how and why water was dangerous, the necessity especially of alcoholic drinks has been removed in every community in this great country by an abundance of pure water. No one except the policeman sees more of the results of overindulgence in alcohol, demonstrated by poverty, sickness, immorality and crime, than the physician. Medicine has reached a period when alcohol is rarely employed as a drug, being displaced by better remedies. Alcohol's only place now is in the arts and sciences. National prohibition would be welcomed by the medical profession. *Prohibition is a war measure the value of which is beyond discussion.*

* * *

PHYSICIANS FAVORING PROHIBITION FOR MEDICAL REASONS

THE National Association for the Study and Prevention of Tuberculosis, at its annual meeting held in Cincinnati, May 9-11, adopted the following resolution:

"Whereas, Several of the European countries engaged in the great war have found it desirable to place themselves on a prohibition basis;

"Whereas, We wish to neglect nothing that will make for the general good of the service; and

"Whereas, Our loyalty in such time of stress should lead us to ask nothing of those going to the front which those remaining are not willing to demand of themselves; therefore be it

"Resolved, That this Association place itself on record as favoring national prohibition both for soldiers and civilians during the war period and for one year thereafter."

THE House of Delegates of the Ohio State Medical Association passed a resolution in favor of national prohibition urging that the "health of our army and the good of our people must be conserved by the abolition of the liquor traffic."

THE Massachusetts Medical Society, through its council at its annual meeting, June 12, 1917, passed unanimously a resolution in favor of national prohibition for the period of the war, "realizing how largely alcohol is a factor in lessening all forms of efficiency, and the intimate connection between drinking, prostitution and the spreading of venereal disease."

THE Connecticut Medical Society at its annual meeting also voted in favor of war prohibition.

THE Florida Medical Association a few weeks ago passed resolutions, expressing the belief that "the time has come for the federal government to take steps looking toward prohibition in the United States of the manufacture, sale, importation, exportation and transportation of alcoholic liquors." The reasons given are the "scientifically proved unfavorable effects of the use of alcoholic beverages even in small quantities, the physical, mental, economic, social and racial evils, the inadequacy of all methods hitherto employed to check or regulate these evils, and the great and rapid growth of public knowledge and sentiment on this subject as shown by anti-alcohol agitation and legislation, through most of our national area."

* * *

INSURANCE MAGAZINE POINTS OUT UNCONSIDERED LOSSES FROM DRINK

REFERRING to the money annually spent for liquor estimated at \$2,300,000,000, and in addition to this the second cost in maintaining jails, insane asylums, etc., estimated at \$6,000,000, an editorial in the *Insurance Magazine* (July), says:

There is another not reckoned in figures—the human waste. It begins with a little lost time over the social glass and halts in the potters' field—the end of a wasted existence.

It would be interesting if it were not so appalling to know how many prospects for life insurance were blighted by the use of booze.

Another feature of interest to the actuary is how many life expectations are curtailed because the insured becomes a victim of the booze habit. . . . Every insurance company will recognize that it [liquor] costs them millions of dollars in new business every year; that it also increases their risks on the number already insured; and that their business and the conservation of the most valuable asset of any country—good citizens—suffer because of the liquor evil. . . .

At some national or perhaps international conference all the chiefs of the insurance world will put a co-operative ban on intoxicants.

It is the man who drinks who is more largely responsible for the present mortality tables than any other factor.

It is the man who drinks who is forced to pay a greater sum for his insurance than otherwise would be the case. . . .

If the man who drinks is still acceptable as a risk at a certain price, then the man whose system is free from the brain-numbing poison is entitled to a lower rate.

CURRENT PRESS COMMENT

FRENCH NEWSPAPER DISCUSSION OF DRINK

THE discussion over alcohol in France goes on persistently, but without arriving at many significant conclusions or results. Much of the newspaper correspondence and editorial matter frankly support these views. The belief in wine, the consciousness of the enormous wine financial interests dull response to suggestions of radical action even against spirits. A professor of the faculty of medicine of Lille in a fervent letter in defense of wine, in *L'Industriel et le Commercant Francais* (Paris, May 23, 1917), concludes by saying:

"Let us fight alcoholism, the deadly source of moral and physical degeneracy, to the limit, but let us not exaggerate nor slay the incomparable liquor [wine] with which the beneficent sun enriches the soil of France."

Here and there, however, is a protesting voice. A few days after the preceding paragraph appeared one reads in *La Bataille* (May 31) a sarcastic comment on the esteem with which alcohol and its representative, "M. Bistrot," are held by professors, the nobility, the high bourgeoisie, the clergy, the people. "Professor Duclaux with his alcohol-a-food proposition began it; Professor Debierre (quoted above) continues it.

"But as for me who lives in the midst of the working people, I fight alcoholism in all its forms; no half measures, no dosing. We do not argue about a poison; we suppress it. Do you argue about opium, cocaine, etc.?"

"I hate this poison because generally my brother workman who is addicted to it is inclined to exceed the limits you set for him, and, forcibly swept off by his vice, he becomes a human *rag*, a being without sense, a slave.

"If you but knew, Messrs. Professors, the harm that you do with your moderation; the workman, knowing or imagining that your opinion is incontestable, follows your advice. Once habit has caught him, that is the end.

"I make no pretensions to scientific knowledge, but I state facts.

"I tell you, nobility, that many of your coats-of-arms have been stained by the intemperance of your valiant men. I tell you, men of the middle class, high and low, that many of your sons have left their health and their money on the fashionable marble bars. I tell you, fellow-workman, that the saloon is your friend while you pay, but pitiless when you fail to pay.

"Let the world's fortunate discuss whether the dose of alcohol to take is a glass or a litre a day. But do you not drink, you who need to struggle for your emancipation. Radically suppress the consumption of alcohol."

Not the least of the complaints in France is that the government police do not enforce what laws they have. "The struggle against alcohol," said the *La Ligue de la Croix* (Paris, June 2, 1917), "is for our country a question of life or death. Our representatives must understand that drunkards and those who live by them are not our masters and they, our representatives,

will be forced to accept the imperative command of the total suppression of beverage alcohol."

Protests are rising against allowing the unrestricted sale of liquor while food restrictions are increasing.

A correspondent of *L'Echo de Paris* (April 11, 1917) facetiously welcomes the probable announcement that cake will be suppressed.

"All right, we have had two cakeless days. Now we shall have seven. If this can make the people in our quiet cities feel the war a little more keenly and stop excessive frivolity, the suppression of cake will be welcome. But," he suggests, "the system is not yet perfectly applied. There are privileged exceptions; one of which is not to be admired. Of all the wastes, alcohol is almost alone in profiting by peculiar liberty. Is it because there is no lack of alcohol? If alcohol were not lacking, alcoholism is always a serious evil. And if alcohol were not scarce would the hospitals have received the order to economize as much as possible in the use of it and sometimes beyond reason? The truth is that the business of alcoholism has very important state protectors and the favors by which it benefits are becoming scandalous when other kinds of business are enduring the hardships of indispensable rules. Restrictions are well; but they should be fair."

Even more outspoken is a correspondent of *Le Temps* (June 1, 1917) who, *Le Temps* says, evidently represents the general opinion: "At a time when restrictions are imposed and considered a duty, and the League Against Alcoholism is so energetically fighting the ravages of a poison, do you not think that a decree ordering two or three days without alcohol would bring to this humanitarian effort the most valuable assistance?"

Le Temps comments in reply that "at a time when restrictions of all kinds are being considered, public opinion is astonished at the ineffective measures against alcoholism," and criticizes the government for failing to enforce existing laws against drunkenness. As long as the government remains in this frame of mind *Le Temps* fears a prescription of "alcohol-less days" would be only nominal, and suggests that individuals, at least, while waiting for the government, could prescribe "two alcohol-less days" for themselves as a part of that "free and resolute economy that the thought of the war should dictate to the conscience."

Le Journal des Chambers de Commerce (Paris, March 25, 1917) outlines the minimum demand that should be made of the government as follows:

1. *Effective* regulation of the consumption of alcohol prohibiting it to women and children under 20 years of age, and to everybody until midday.
2. *Effective* regulation of the manufacture of drinks based on alcohol with a view to eliminating harmful substances, due to defective distillation of products drawn from unhealthful plants.
3. Prosecution of intoxicated persons, and of those who are responsible for selling them the liquor.
4. Limitation of selling places.

La Ligue Nationale contre l'Alcoolisme has petitioned the Minister of the Interior to close all selling places at 6 p. m. and to extend to liquor selling places the same rules as those which close tea-shops two days a week.

L'Union Sacrée contre l'Alcoolisme, of which Jean Finot is secretary, demands prohibition of the sale of spirits during the war.

The French Woman's Union against alcohol has sent a letter to all Senators and members of the Assembly asking them to join in freeing their country from its most terrible evil—alcoholism. The letter, which is published in the Paris *Le Temps* (May 24, 1917), says:

"So far from injuring French industry and commerce as they would have us believe, we desire for them a greater prosperity in furnishing strong and sober workmen. Let us stop turning alcohol into the human machine; leave it for munitions, industry, transportation; keep it for pharmacists and the hospitals. Suppression easily agreed to in the war zone ought to extend to the whole country. Not a Frenchman, conscious of the peril, will shrink before the only solution of the problem.

"We are confident that you will give your great influence. Your country demands it in the name of her children who have died for her."

* * *

IF AMERICA WERE BONE DRY

ALL the old-time arguments of the liquor trade against prohibition are collected in the *World's Work* (July, 1917) in an article bearing the title above, and then are disposed of in view of the war exigencies demanding capital, labor, railroad transportation facilities and especially food. "The new conscription will remove five times the number of bartenders from their daily avocations and place them in the army. Recruiting for the regular army, militia and navy will take almost a million more. Employees of the liquor trade will thus have no difficulty in finding employment more remunerative and doubtless more useful than that in which they are now engaged. Unemployment is the least of our troubles in a war such as the present one.

"The railroads will not miss the freight business of the breweries and distilleries for the war has given them more business than they can handle. Nor does the loss on taxation seem so enormous when we are planning to raise eight or ten millions for war purposes and tapping countless sources of taxation unused hitherto.

"A large part of the \$1,000,000,000 now invested in the 'trade' must represent real estate and buildings practically all of which could be used for other purposes.

"But the argument which comes back with particular force against the liquor interests is their large use of grain. The danger of a food shortage is a genuine one. The fact that America's convivial habits lead us to drink up four billion loaves of bread a year indicates a source of waste that cannot be ignored. The population of England could subsist on the rye, corn

and rice used in liquor in the United States for nearly six months. The population of France could subsist for nearly seven months. In other words, the saving from these three cereals alone could conceivably win the war for the allies."

"Prohibition versus Patriotism," is the theme of an editorial in the *North American* (June) which charges that compulsory prohibition is the least defensible of all the "extraneous proposals" which "fanatics, heedless of the urgent need of expedition" have tried to engraft upon war measures.

Among the choice phrases used is the assertion that the question is not allowed to rest upon its merits, but is approached as one already settled "by the mere dicta of denatured Pharisees, incorrigible bigots, hired lobbyists, pusillanimous congressmen," all those who are now "taking advantage of the nation's peril—placing prohibition above patriotism."

The old arguments of the loss of revenue, property and labor are repeated as is the brewers' claim that barley is not used for human food, to which the editor of the *North American* adds the claim that it has little value for animals and cannot be substituted for other grains, despite Mr. Hoover's explicit statements that it can be and ought to be so used.

The editor would leave the question to the Department of Agriculture and Mr. Hoover, who must consider only its bearings upon helping to win the war.

Eugene Davenport, writing in the *Atlantic Monthly* (July), also emphasizes the waste of foodstuffs in their conversion into liquor and concludes that not to prevent the waste in brewing "would be little short of criminal negligence."

"Prohibition's Own Story," by Deets Pickett in the *Forum* (June), shows that the movement is no sudden emotionalism or hysteria, that it has been growing since the publication of the Rush pamphlet (1785-87). Important milestones are indicated in 1808, 1818, 1840-42, 1847, 1907. The leaders and the movements of these epochs are sketched as are the influence of the Civil War and the growth of the later prohibition era.

Liquor papers are called upon to testify to the satisfaction the population of the prohibition states feel over the laws, and this is verified by the results of an extensive investigation carried out by the Research Department of the Board of Temperance of the Methodist Church, of which Mr. Pickett is one of the secretaries. The results cover improvements in the amount of crime, poverty, beggary; the diversion of liquor property to wholesome uses calling for more labor and raw material; the increased buying power and greater activity in retail business; larger bank savings; no more bootlegging than before prohibition, and in some cases less; reduction of from 85 to 95 per cent in liquor consumption; the reduction more in whisky than in beer; taxes not made higher, and in some cases made lower; the sentiment of business men in every prohibition state overwhelmingly in favor of prohibition. The remainder of the article answers current objections.

THE argument that liquor must be retained for the sake of the working-man constitutes a gross slander on the workers, says *The International Record* (July, 1910). "Labor leaders are right in protesting against such a slander." *The Record* publishes a long list of statements from labor leaders in Great Britain repudiating it, paragraphs from American labor papers supporting prohibition. There is an interesting history of liquor boycotts by working-men of continental Europe before the war together with organized declarations against drink. It is unjust to labor as a whole to put upon it the onus of responsibility for continuing the liquor traffic.

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RECENT ARTICLES IN WEEKLIES AND MAGAZINES DEALING WITH THE ALCOHOL QUESTION

Inclusion of an article in this list does not necessarily imply indorsement of its views.

THE OUTLOOK: *War and Drink*, May 2. *Alcohol and Disease* (and others), May 16. *National Prohibition in Wartime*, June 13

THE SURVEY: *Economics of War Prohibition*, May 12. *Bread or Beer?* May 19. *Child Labor and Prohibition*, May 26. *Spotted Prohibition*, June 2.

THE INDEPENDENT: *Prohibition Progress*, May 19. *War Prohibition Now*, May 26. *To Win the War*, June 16. *Make Way for Prohibition*, June 30.

LITERARY DIGEST: *Nation-wide Prohibition*, May 26. A summary of the results of prohibition gathered from editors in prohibition states.

FORUM: *Prohibition's Own Story* (see page 225), June.

WORLD'S WORK: *If America Were Bone Dry* (see page 224), July.

ATLANTIC MONTHLY: *Shall the Brewing of Grain be Prohibited?* (see page 225), July.

NORTH AMERICAN REVIEW: *Prohibition vs. Patriotism* (see page 225), June.

REVIEW OF REVIEWS: *Seattle After a Year of Drought*, May.

CURRENT OPINION: *In the Last Line of Trenches*, June. *Making Drink Tabu Among the Soldiers*, July.

AMERICAN MAGAZINE: *The Cup That Queers*, June. *Hack's Struggle Against Booze*, July.

MUNSEY'S MAGAZINE: *In the Era of Prohibition*, May. *Britain's New Prohibition*, June.

PHYSICAL CULTURE: *The Whisky Evil*, May.

BOOKS AND PAMPHLETS

THE BOOK OF THRIFT

By T. D. MCGREGOR, *New York: Funk & Wagnalls Co., \$1.00 net; by mail of The Scientific Temperance Journal, Boston, \$1.10.*

THE thrift which spends a little less than is earned finds a valuable exponent in this book, which has a practical message for every one who earns or handles money. The importance of individual thrift is emphasized, but more important are the demonstrations of what regular savings, though small, when wisely handled, will do in promoting or achieving independence for the saver. Practical methods of saving are described, as are the various reliable institutions for encouraging systematic thrift such as co-operative banks, savings clubs, building loan associations, savings banks, etc.

Naturally the author points out the worse than waste in the expenditure for alcohol. An employer of a large number of employees is quoted as saying: "Against intemperance no combination of good qualities can prevail. Temperance and thrift are virtues which act and react upon each other, strengthening both, and are seldom found apart."

* * *

THE WAY LIFE BEGINS

By BERTHA CHAPMAN CADY and VERNON MOSHER CADY. *Foreword by William F. Snow, M.D., New York: American Social Hygiene Association. \$1.25, postage \$0.08; by mail of The Scientific Temperance Journal, Boston, \$1.33.*

THE contribution that nature knowledge can make toward an understanding of life and its reproduction is carefully outlined in this little book designed to help parents and teachers to possessing that background of knowledge they need in giving children and youth wise instruction in this subject. It begins naturally with plant life, and advances through the story of the development of lower forms of animal life to finally the human story. It is not written in a form to be directly retold to children, but rather as a guide to the general scope of facts that can be used as opportunity is offered by the child's questions or as natural surroundings afford timely occasion at a suitable age of the child or youth. With abundance of scientific fact, suggestion and many attractive illustrations, the book keeps well above the plane of purely physical consideration of sex toward suggesting the interpretative power needed to bring the question into its normal relation with all aspects of human life. The book is an effort to bring together the scientific and moral appeal as methods of instruction in this important matter.

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GOD, THE INVISIBLE KING

By H. G. WELLS. *New York: MacMillan Company. \$1.25.*

THE reader of *Mr. Britling* naturally expected a further elaboration of Mr. Wells' views as to religion and its meaning not only in this period of world turmoil, when as one of the men in the trenches is said to have expressed the matter, "all a man in service wants is food and work and rest and God," but to life in general. Many readers will probably not agree with Mr. Wells in his conception of God. It clearly represents a reaction against extreme formalism and dogma which do not prevail in all churches or in all branches of Christian faith. To him, however, it represents growth and a living vital faith, a consciousness of the presence of God which thousands of people also find within the boundaries of the usual Christian faith.

SURE POP AND THE SAFETY SCOUTS

By ROY RUTHERFORD BAILEY, *Yonkers, N. Y.: World Book Company, \$0.42.*

PREPARED under the direction of the National Safety Council, this little book in the form of a story presents the essential principles of "safety first" work in practical operation with a view to making children more alert to their own safety and to their responsibility for the safety of others based upon thoughtfulness and courtesy.

* * *

THE LAND OF DEEPENING SHADOW

By D. THOMAS CURTIN. *New York: George H. Doran Company. \$1.50.*

FOR a picture of Germany in war-time, as seen by one who went among the German people of all classes, this readable volume is especially to be commended. One rises from its reading with no little sympathy for the German *people* in their domination by a bureaucracy which controls all the usual avenues of information as to exactly what is taking place and as to the views of the outside world. It shows that until the power of this bureaucracy is broken a Germany thus controlled will be a troublesome member of the family of nations. War time conditions in Germany are clearly set forth and the changing attitude of the people toward the war from enthusiasm to grim endurance, or weariness and restiveness.

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WRECKAGE

By J. HARTLEY MANNERS. *New York: Dodd, Mead & Co. 1916. \$1.00.*

A three-act drama by the author of "Peg o' My Heart," dealing with drug addiction, its causes, effects and treatment. The underlying theme is the responsibility of physicians and nurses in administering habit-forming drugs. Preface by Charles B. Towne.

* * *

VOCATIONAL PSYCHOLOGY

By HARRY L. HOLLINGSWORTH. *New York: D. Appleton & Co. 1916. \$2.00.*

THE hit-or-miss method of finding a life vocation is giving way before more definite determination of just what the boy or girl is best fitted to do in the world. Various methods for ascertaining this fitness have been studied for several years by Professor Hollingsworth, who in this volume has brought together a thorough presentation of the details and value of the different methods. The field is by no means cleared up yet, but this study is valuable as a guide-post to the individual in ascertaining and evaluating his own abilities and the requirements of various vocations so that he may best judge for which he is adapted. From the employers' point of view it will be an aid in determining the fitness of prospective employees for positions which they must fill.

When these psychological relations are better understood, it will be possible, for instance, to steer out of "blind alley" occupations those qualified for positions offering advancement, and to steer into such occupations those who can work happily and efficiently there. A chapter on Vocational Aptitudes for Women by Dr. Leta Setter Hollingsworth indicates that so far careful investigations in psychology have revealed no difference in mental traits in men and women, that "so far as is at present known, women are as competent intellectually as men are to undertake any and all human vocations."

PAMPHLETS

Those starred () are of special interest on the alcohol and related questions.*

*THE NARCOTIC EVIL IN PHILADELPHIA AND PENNSYLVANIA. *Report of a year's study by the Philadelphia Narcotic Drug Committee, EDWARD W. BOK, Chairman; DR. JOHN H. W. RHEIN, Secretary, 1732 Pine St., Philadelphia, Pa.*

*REPORT OF THE MASSACHUSETTS SPECIAL COMMISSION. *To Investigate the Extent of the Use of Habit-Forming Drugs, January, 1917. Wright and Potter, Boston, state printers.*

*FEDERAL RESPONSIBILITY IN THE SOLUTION OF THE HABIT-FORMING DRUG PROBLEM. By CHARLES B. TOWNS, 203 *Central Park West, New York City*.

The question of how to deal with the use and sale of habit-forming drugs is pressing insistently for prompt attention. Two investigations are reported in the above mentioned pamphlets. The third makes recommendations for federal and for international action.

The Philadelphia committee found that of 86 persons addicted to the use of one or more narcotic drug, 58 had formed the habit through association, not only in the company of dissolute tenderloin characters, but with fellow workmen and men met in pool rooms and saloons. Sixty-four of the 86 became addicted to the use between the ages of 18 and 30. Loss of time from work due to drugs varied for six months to two years in 39 cases.

The committee recommends provision for adequate and efficient treatment of drug inebriates and a state law more strictly controlling the manufacture, sale and use of opium, coca and their derivatives and to cover the features of drug-taking not covered by the federal law.

The Massachusetts commission, appointed in 1916 by authority of the Legislature, consisted of Dr. F. G. Wheatley, H. C. Lythgoe, director of the State Health Department division of food and drugs, and A. C. Weber, Assistant District Attorney of the Suffolk district.

The commission found that the habitual use of habit-forming drugs is not confined to any particular class of people or to any particular trade, occupation, or calling. The 254 patients in nine months of one physician doing special work with these addicts represented between 80 and 90 occupations. The occupations represented by 10 or more victims were clerks 16, housewives 15, waitresses 14, salesmen 13, waiters 11, actors 10. About two-thirds of the patients were men. About the same proportion gave their age as between 21 and 30 years. No one admitted being less than 21, though, says the report, it is a well-known fact that many addicts are under this age.

The report outlined the physical effects of the use of the chief habit-forming drugs and suggested additional legislation to facilitate better control of the illegitimate distribution of habit-forming drugs by drug peddlers, certain physicians, and druggists. Provision of a state institution for custodial treatment of non-criminal addicts and strict control of private institutions is recommended.

Nothing is said of the preventive measure of warning the public and especially boys and girls to the dangers in these drugs.

Mr. Towns presents in his pamphlet an intelligent argument, based on long personal experience with the habit-forming drug question, for the appointment of a federal committee to investigate the whole problem of so dealing with the handling of these drugs and of providing treatment for victims that the evil can be effectually terminated. Present legislation is evidently insufficient. The author believes that international action will be necessary. He presents a serious picture of present conditions with which everyone interested in any form of alcohol or other narcotic questions ought to be familiar.

*A SICKNESS SURVEY OF BOSTON, MASS. By LEO K. FRANKEL and LOUIS I. DUBLIN. *Metropolitan Life Insurance, Company, New York, 1916*.

PREVALENCE OF SYPHILIS. By WM. M. BRYAN and JAMES F. HOOKER. *Reprint No. 378 from United States Public Health Reports. Nov. 24, 1916*.

THE CANCER PROBLEM. *What Has Been Accomplished in America in the Past Two Years*. By WILLIAM LEAMAN BAINBRIDGE, A.M., Sc.D., M.D., C.M. *Reprint from the Medical Record, Jan. 13, 1917. New York: William Wood & Co.*

*MATERNAL MORTALITY FROM ALL CONDITIONS CONNECTED WITH CHILDBIRTH. By GRACE R. MEIGS, M.D. *United States Children's Bureau. Publication No. 19, 1917*.

The protection of public health is many-angled. As one means of better estimating the size of the undertaking sickness surveys have been undertaken in several cities.

Returns from 97,259 persons in 20,497 families covered by the Boston survey, showed that almost 2 per cent of the persons canvassed were sick. Nine-tenths of these were unable to work. On the basis of these figures it was estimated that for the population as a whole, this means a total loss from sickness per year of 3,635,100 working days, or an average of 6.5 days per individual. No attempt has been made yet to estimate the extent of the alcoholic factor in this sickness.

Present success in dealing with two great plagues, syphilis and cancer, depend largely on early detection of the diseases.

Bryan and Hooker conclude from the results of routine examination by the Wasserman test in several hospitals that the prevalence of syphilis is much greater than is shown by ordinary hospital and medical records. The suggestion is made that if physicians and the general public are educated to demand this test as they have been to demanding examination of sputum for tuberculosis, it may be possible to recognize many cases in which syphilis is involved and treated accordingly which could not be properly diagnosed without such a test.

Bainbridge, reviewing the cancer situation, thinks that investigations as yet throw no light on the causation of cancer to justify a change at present in the generally accepted news for treatment. Education as an aid to prevention by securing early diagnosis and surgery as the main line of treatment still stand as the only routes yet offering hope of reducing cancer mortality.

It is disappointing to learn from Dr. Meigs that while maternal mortality is in great measure preventable, no available figures show a decrease in the United States in recent years, although certain other countries show improving rates. This condition is due, it is believed, to "unconscious neglect due to age-long ignorance and fatalism."

*THE RESULTS OF TURNING FRUITS INTO WINE AND BRANDY. By CORA FRANCES STODDARD. *The Scientific Temperance Federation, 36 Bromfield St., Boston, Mass. Reprint from Congressional Record, June 27, 1917.*

THE proposal to continue the manufacture of wine in the United States opened up the whole wine question.

The emphasis laid by the wine producers upon what they call "light wines," which they urge as desirable "hygienic drinks" likely to promote "temperance," has obscured the facts that along with the development of the wine industry there has been an increased consumption of spirits made from fruits, and that the wines themselves are by no means all "light wines."

The report of the Commissioner of Internal Revenue (1916, page 17) shows that normally nearly 5,000,000 gallons of brandy are used in fortifying wines. These fortified wines may contain from 7 to as much as 24 per cent of alcohol.

France and Italy have been through the experience that lies before us if we open the way to a larger production of wine. After the grape-vine pest, *phylloxera*, was conquered in France, numerous regions previously devoted to grain were converted into vineyards. *If France had this acreage still producing grain it would now be helping out her food supply.* Over-production of wine encouraged its conversion into spirits. Today there are not far from 2,500,000 wine and cider producers, and a million home distillers. (Frédéric Riemain, Secretary of the Le Ligue Nationale contre L'Alcoolisme, 1916), and these constitute a body of interests which have blocked every effort during the war to free France from the handicap which drink places upon her.

Dr. Leonardo Bianchi published in *Nuova Antologia* (Aug., 1916) a long article on the development of the wine industry in Italy and its economic disadvantages to a country which has to import so heavily its grain supplies. He urges that there be no extension of vine cultivation, that vines destroyed by the *phylloxera* be not replaced, that instead the land be used for the cultivation of wheat and other grains greatly needed by Italy.

But here, too, is a physical problem similar to that of France. "The problem for Italy," says Dr. Bianchi, "is not so much attention to acute alcoholism (drunkenness), as to chronic intoxication which slowly and daily undermines the vigor of the country."

Switzerland, another wine using country, found that alcoholism developed in alarming proportions.

In 1885, the government took a government monopoly of the manufacture and sale of distilled liquors and has ever since appropriated a part of the profits to preventing drunkenness and the curing of inebriates. The use of brandy decreased as a result of the monopoly, but the use of wine increased from 38 litres per person in 1884 to 69 litres in 1898. One of the ardent advocates of the monopoly legislation, E. W. Milliet, of Bern, found on comparing the consumption of actual *alcohol*, that during the five year period 1880-1884 preceding the adoption of the spirits monopoly the average per capita consumption of actual *alcohol*, was 14.3 litres. In the decade 1892-1902, although the consumption of distilled liquors had decreased, the consumption of wine had so greatly increased that the actual per capita consumption of alcohol had gained by 10 per cent and amounted to 15.78 litres per capita as against 14.3 litres before the impetus was given to wine-drinking by adoption of the spirits monopoly.

The actual increase was even greater, as during the interval thousands of Swiss had become total abstainers.

The experience of these three wine producing and wine using countries shows that wine-production when encouraged tends to divert to this purpose land needed for other foods so long as the growers produce grapes for wine instead of for food or non-alcoholic drinks. In all three countries the tendency has been toward an increased use of wine leading to chronic alcoholism with all its physical and moral waste of human power and efficiency. In both France and Italy, especially in France, it has led to production and use of spirits which has intensified the evils of alcoholism and which today in the midst of this world war is a tremendous handicap in affecting the food supply, in reducing the present effectiveness of the nation, in re-establishing normal industrial relations which must be restored as rapidly as possible and in impairing the future generations.

*DIAGNOSIS OF DELIRIUM TREMENS. By CHARLES E. SCELETH, M.D. *Reprint from Interstate Medical Journal, Vol. XXIII. No. 6, 1916.*

*CEREBRAL EDEMA (WET BRAIN). By C. E. SCELETH, M.D., and ARTHUR F. BEIFELD, M.D. *Reprint from American Journal of the Medical Sciences. Vol. CXLIX. No. 6, 1915.*

A RATIONAL TREATMENT OF THE MORPHINE HABIT. By CHARLES C. SCELETH, M.D. *Reprint from Journal American Medical Association. Vol. LXVI. March 14, 1916.*

*PROSTITUTION IN ITS RELATION TO THE ARMY ON THE MEXICAN BORDER. By M. J. EXNER, M.D., *Amer. Social Hygiene Assn. N. Y. City.*

FRIEND OR ENEMY? TO THE MEN OF THE ARMY AND NAVY. By M. J. EXNER, M. D. *Amer. Social Hygiene Assn., N. Y. City. (See footnote page 192.)*

KEEP IN FIGHTING TRIM. *Amer. Social Hygiene Assn. N. Y. City.*

MORALS AND VENEREAL DISEASE. By EDWARD L. KEYES, JR., M.D., PH.D. *Amer. Social Hygiene Assn. N. Y. City.*

*WAR-TIME PROHIBITION. By PROF. IRVING FISHER. *Publicity Temperance Bureau, Stock Exchange Building, Philadelphia, Pa.*

WHAT THEY SAY OF THE NEW QUARTERLY

THE SCIENTIFIC TEMPERANCE JOURNAL appeared as a 64-page quarterly for the first time with the May, 1917, number. With increased size, new make-up, enlarged scope of contents, the JOURNAL as a quarterly is already commending itself to discriminating readers, from some of whose letters the following paragraphs are taken:

Boston, Mass.

I am greatly pleased with the new form of the SCIENTIFIC TEMPERANCE JOURNAL. It will be a pleasure to speak of it in the Christian Endeavor World. AMOS R. WELLS,
Editor Christian Endeavor World.

Boston, Mass.

We are very much interested in this new form of the SCIENTIFIC TEMPERANCE JOURNAL and have called the attention of our teachers to it through the columns of our Pilgrim Teacher. There is no doubt in our minds that this is the best magazine dealing with this subject for the teachers of our church schools to use. ELEANOR F. COLE,
Of the Editorial Staff, Educational Publications of the Congregational Sunday School and Publishing Society.

New York

I have just read the May number of the SCIENTIFIC TEMPERANCE JOURNAL and want to congratulate you upon the subject matter as well as the typographical appearance of the magazine.

It is a mighty fine job, and I wish it might be given wide circulation.

CHARLES STELZLE,

Field Secretary of the Federal Council of Churches.

Pittsburgh, Pa.

I am writing to congratulate you on the last number of the SCIENTIFIC TEMPERANCE JOURNAL. Both in matter and appearance it is worthy of highest respect and praise.

CHARLES SCANLON,

General Secretary of the Board of Temperance of the Presbyterian Church.

Chicago, Ill.

We received a few days ago the first copy of the SCIENTIFIC TEMPERANCE JOURNAL in its new form as a quarterly. I am very much pleased with the strength and the appearance of the magazine in its new form. I have always regarded it as the strongest publication in America on the scientific phases of the liquor problem. Its new form strengthens it, if possible, and makes it more practicable to all students of the question who wish to keep for constant reference the fine new material published in the JOURNAL. H. S. WARNER,

General Secretary of the Intercollegiate Prohibition Association.

LaCrosse, Wisconsin.

You are certainly to be congratulated upon the enlarged periodical, the beauty of its form and the splendid articles it contains. We have long appreciated your magazine and rejoice with you in the marked advance you are making in the new periodical.

B. S. STEADWELL,

President World's Purity Federation.

Washington, D. C.

I am charmed with the new dress of the SCIENTIFIC TEMPERANCE JOURNAL, which is worthy of its splendid contents. It is easily first in the rank of temperance journals in its appearance and second to none in the quality of its matter. I have read this first issue of the new series with great enjoyment and profit.

W. F. CRAFTS,

Superintendent International Reform Bureau.

Chicago, Ill.

I want to congratulate you on the May number of the SCIENTIFIC TEMPERANCE JOURNAL, which has just come into my hands. It is beautiful and dignified in appearance, and the subject matter is splendid. It is a credit to you, and I can not resist writing to tell you that I am delighted with it.

E. J. DAVIS,

Chicago District Superintendent of the Anti-Saloon League.

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SCIENTIFIC TEMPERANCE JOURNAL

NOVEMBER, 1917



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DOES IT MATTER WHETHER ONE DRINKS WHISKY OR BEER?

THE prevalent opinion that one can drink beer without being harmed as he would be if he took the same amount of alcohol in the form of whisky has at last been subjected to precise experimental tests and found incorrect.

The degree of concentration of an alcoholic liquor is not the important thing it has been supposed to be. As the abstainers have said all along, "What really matters is the amount of alcohol taken."

Experimental testing of the matter has been carried out by a Scandinavian physiologist, Dr. E. M. P. Widmark.*

ALCOHOLIC CONTENT OF THE BLOOD AFTER USING VARIOUS LIQUORS

He worked on the theory advanced by the French experimenter, Nicloux, that after alcohol is taken, about the same proportion of it will be found in the various fluids of the body as in the blood. Dr. Widmark found this to be true in his experiments and from it he proceeded to ascertain whether either the blood or the urine contained more alcohol after taking strong alcoholic solutions than when the same amount of alcohol was taken in more diluted forms—a very important matter to settle in view of the claims made by brewers and wine growers that only the stronger alcoholic liquors are injurious.

Dr. Widmark found that when he took about 30 ccm. of alcohol in Pilsener beer, 4.5 alcoholic strength, the blood during the first hour afterward contained 0.49 per cent of alcohol. On the following day when he reduced the alcoholic strength of the same amount of beer to 2.25 per cent by diluting it with water, the alcoholic content of the blood for the corresponding time was practically the same, if anything a trifle more, precisely 0.50 per cent.

*Abstract from translation of an article by Dr. J. Scharffenberg. *Internationale Monatshrift z. Erforschung d. Alkoholismus*, XXVII, Heft 7-8, July-Aug., 1917.

The second hour the blood registered 0.32 per cent alcohol with the undiluted beer and 0.28 per cent with the diluted.

In another series of experiments Dr. Widmark tested varying solutions of alcohol ranging from 43.6 per cent, the equivalent of whisky, to 4.4, the equivalent of most beer.

SIMILAR PROPORTIONS OF ALCOHOL EXCRETED

During the first hour the urine contained much less alcohol than during the following hours up to and including the seventh; but the whisky equivalent resulted in 0.14 per cent alcohol in the urine; the beer equivalent in 0.16 per cent, while the wine equivalent (14.5 per cent alcohol) gave 0.20 per cent alcohol in the urine the first hour.

The third hour registered the highest amount of alcohol, which for the whisky grade of concentration (43.6 per cent) gave 0.55 per cent of alcohol in the urine, the wine equivalent (14.5 per cent) gave 0.57 per cent, and the beer equivalent (4.4 per cent) gave 0.58 per cent.

This would indicate that the kidneys were subjected to a stronger alcoholic solution by beer drinking than by whisky, and that the beer drinker gives his kidneys a stronger alcoholic solution to eliminate than does the whisky drinker, with the wine drinker possibly midway between.

The differences are, however, too small to furnish an argument, and Dr. Widmark only claims that the degree of alcoholic concentration in the drink used makes no difference in the amount of alcohol circulating in the blood. One cannot find, he declares, that the degree of dilution of the liquor drank exerts any kind of influence upon the concentration of alcohol within the body. He admits that possibly this holds true only for large amounts of alcohol and large volumes of fluid, such as were used in these experiments, and that it is possible that in such cases there might be some differences in the rapidity of absorption due to differences in concentration.

Dr. Scharffenberg points out that Dr. Widmark's result is in keeping with the opinions advanced by Prof. Thurnberg on purely physiological grounds as to the difference in the effects of concentrated and diluted alcoholic solutions.

The physiological effect, Dr. Thurnberg holds, depends first of all upon the amount of alcohol used. Since the same amount of alcohol is present in two glasses of weak beer as in one glass of regular beer or in a half glass of whisky, the alcoholic effect is, on the whole, the same, and from the theoretical standpoint beer and whisky cannot be put in opposition to weak beer.

The effect upon the nervous system depends upon the amount of alcohol used. The effect upon the lining of the stomach may be worse with the stronger liquors because they produce more irritation of that mucous membrane. Spirits of 40 per cent alcohol can produce an effect upon the mucous membrane which would not be demonstrable from the same amount of alcohol in the form of beer or weak beer.

WHY DILUTION MAKES LITTLE DIFFERENCE IN EFFECTS OF ALCOHOL

But when the alcohol has once entered the mass of circulating blood it is immaterial whether it was taken in combinations with more or less water. One might suppose that the water taken with the alcohol would result in less alcoholic concentration in the blood; but the amount of water one takes in this way is too insignificant in comparison with the body mass to play any part. Suppose one takes 15 ccm. (half an ounce) of alcohol at one time in the form of a glass of spirits and at another time in the form of four glasses of weak beer. Since our bodies are about two-thirds water,

IF YOU DRINK EVERY DAY

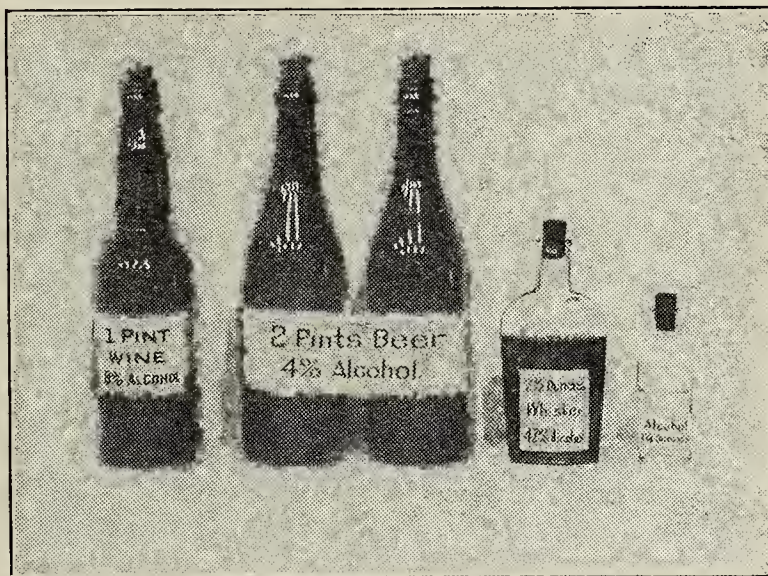
1 Pint of Wine (8% Alcohol)

OR
2 Pints of Beer (4% Alcohol)

OR
3 Ounces of Whisky (42% Alcohol)

YOU GET FROM EACH LIQUOR

THE SAME AMOUNT OF ALCOHOL—1¼ ounces.



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a man weighing 70 kilograms (154 lbs.) would have in his composition about 46 quarts of water. But since alcohol taken into the body is distributed uniformly through the water of the body, this half-ounce of alcohol would be distributed in one case through 46 quarts of water and in another case through 46 2-3 quarts of water, a difference that is, of course, insignificant.

RAPIDITY OF ABSORPTION THE SAME

This observation relates to the completed process of the distribution of alcohol in the body. It is possible that a difference in the concentration of the same amount of alcohol might make a difference in the time of ab-

sorption. But the supposition finds no support in Dr. Widmark's results, since a quarter of an hour after the alcohol was taken practically the same concentration was found in the urine whether the alcohol was drunk in a 4.4 per cent or in a 43.6 per cent solution. On the whole, therefore, Prof. Thurnberg's argument finds definite support in Dr. Widmark's experiments.

This furnishes scientific support and force to an important point in the argument for abstinence.

In the Scandinavian countries and in Germany there has been much discussion whether abstainers were justified in drinking weak beer. In Denmark most of the abstinence societies permit their members to use what is called a "tax free" beer whose alcoholic content is $2\frac{1}{4}$ per cent by weight. In Sweden the societies allow the use of a beer which as a rule contains only about 1 per cent of alcohol by volume. It is not easy to drink large enough amounts of so weak a beer as to affect the brain. If, as had been proposed, the limit of alcoholic strength for non-taxable beer should be raised, the question would become a serious one for Sweden.

In Norway the limit for untaxed beer is now $2\frac{1}{2}$ per cent by weight. In 1917 the limit was fixed at $2\frac{1}{2}$ per cent by volume, which is about 2 per cent by weight, the exact figure varying according to the specific gravity of the beer.

The question of the use of this tax-free beer by members of the abstinence societies has long been under debate. Some societies permit it; some let every one decide for himself.

Personally, says Dr. Scharffenburg, I have held that abstainers should not drink it for the reasons which Prof. Bunge gives, and the Widmark work supports this position. If an abstinence society permits the use of beer it thereby establishes a rule not only for the alcoholic limit but also for the daily use. It would be concluded that beer should be drunk only at meal time. And such use means a departure from the standpoint of total abstinence. In no case should anyone take as much as he pleases of these low alcoholic beers.

The experience of beer-drinking countries shows that the daily drinking of five liters of beer is by no means extraordinary. Anyone who has ever watched the beer drinking by the frequenters of the Bavarian beer halls knows that. Five liters of beer containing 2 per cent alcohol corresponds to 100 ccm. of alcohol (about three and one-third ounces), and such an amount is inconsistent with the standpoint of total abstinence.

There is, of course, a limit to the amount of beer a man can drink. Medical literature contains reports of men who have drunk from 15 to 20 liters a day, particularly on holidays. Twenty liters of beer containing 2 per cent alcohol would amount to 400 ccm. of pure alcohol, or as much as a liter of whisky at 40 per cent alcohol. There are examples of the daily consumption from 600 to 700 ccm. of alcohol, extreme amounts that obviously could only be taken in very concentrated drinks. But within the usual limits the strength of an alcoholic solution makes little difference.

If spirits can easily injure the lining membrane of the stomach, so large an amount of fluid as that of the beer throws a larger amount of work upon the stomach and intestines, the blood vessels and the nerves.

The absolute amount of alcohol which is separated by the urine increases with increasing amounts of urine. But this fact has little practical significance except when extremely large quantities of alcohol are used.

* * *

WHY THE WEST AND SOUTH WANT A DRY WAR

By ELIZABETH H. TILTON

BORN and bred in anti-prohibition circles, against prohibition myself, but becoming interested in liquor legislation through working in the congested districts of a large and saloon-ridden city, I finally decided to study first hand, liquor legislation in general and prohibition in particular. I went both West and South, and I want to set down a picture of prohibition as I found it in the South, and, I may say furthermore, in the cities of the South that had gone dry against their will, put dry by the vote of the state, such as Savannah, Georgia, Columbia and Charleston in South Carolina, and Richmond, Virginia.

THE PERIOD OF SPOTTED PROHIBITION IN GEORGIA

I went to that notorious law-breaker, Savannah, Ga. Georgia from 1908 to 1916 had been under a law that forbade the sale of distilled liquors in saloons but allowed all saloons to sell light or near-beer. The law was a failure; whisky in some cities was sold openly in defiance of law; on the sly in others, and as for the beer being light, Judge Broyles of Atlanta said to me: "A light or near-beer law is practically unenforceable as you cannot have a chemist with every barrel to see that the beer is light; besides men can and do get drunk on beer."

Georgia decided that prohibiting whisky but keeping beer was no solution of the drink evil; that to make headway one must first and foremost *close the saloons*, and on May 1, 1916, Georgia closed all saloons, allowing limited importation for private use.

A CITY COMPELLED AGAINST ITS WILL NOT OF THE SAME OPINION STILL

Savannah, as I said, voted wet, but was forced to go dry by the larger state vote. I was in Savannah in March, 1917, ten months after the régime of real prohibition set in.

POLICE AND HEALTH TESTIMONY

I first visited the police station. "I was a wet," said the Chief of Police, "but now am a dry; conditions in the homes of the poor are so much better," and he gave me the following figures. The first figures (1915) are for Savannah under spotted prohibition, which allowed beer in saloons, but no whisky; the second are for Savannah under prohibition (no saloons) in 1916-1917. The periods compared are ten months before and ten months following prohibition (May 1, 1915, to March 1, 1916, and May 1, 1916, to March 1, 1917):

Arrests for assault with intent to murder, 49, reduced to 18, or 64 per cent less.

Disorderly conduct reduced from 2,117 to 1,052, or 51 per cent less.

Drunkenness and disorderliness, 1,197 to 343, 72 per cent reduction.

Lunacy reduced from 61 to 28, or 54 per cent reduction.

I next saw Dr. Brunner, secretary of the Board of Sanitary Commissioners. He said: "Two years ago I called prohibition poppycock, but prohibition enforced is a mighty good thing, and we have got that mighty good thing here." He declared that the prisoners' chain gang of negroes had carried under "spotted or whisky prohibition" from 600 to 700 negroes. After five months of prohibition the gang had dropped to approximately 200 and stayed about there ever since.

"And look at my homicides," said this convert to prohibition; "prohibition began May 1, 1916:

"In 1915—24 homicides (negro by negro).

"In 1916—10 homicides (negro by negro).

"And eight of these homicides took place before prohibition became the law."

BUSINESS MEN CONVERTED TO PROHIBITION

The most striking thing in Savannah was that the business men were almost all converted. The secretary of the Retail Merchants' Association said that their members had feared the upset to business that might come from closing the saloons, but the fact was that closing the saloons left so much more money in circulation that most businesses soon increased, and the displaced labor was quickly absorbed.

When I asked who fought prohibition hardest, they told me, "the rich and fashionables." Those I was told could be found on the bay over the river at the Cotton Exchange. I went there and saw the secretary, Mr. Teesdale. He said: "We were not generally prohibitionists here and we did not want the law. Bitter were the complaints at first, especially as prohibition closed a barroom opposite, at which rumor said the Exchange spent \$10,000 a year. But gradually the men got used to it and as the news of reduced wreckage from drink and increased business, better collections and so on, came more and more to their ears, they became reconciled, and now after ten months," said Mr. Teesdale, "I think very few men in the Exchange would want to see the saloon back."

The agent of the Chief of Police told us that after prohibition began, rent collectors would say, "The unprecedented has happened—this week we were able to collect every rent." The banks were also converts. "Prohibition is better for business," they said.

I visited the Poor People's Bank and was told that there had been a real increase in deposits of small savings among the poor under prohibition. Figures were given me but would take too long to explain them.

The Mayor of Savannah was a strong prohibitionist and that had undoubtedly been a strong factor in Savannah's good showing.

WHAT HAPPENED IN SOUTH CAROLINA

From Savannah we went to Columbia, South Carolina. South Carolina from 1893 to January 1, 1916, had been under the dispensary system. The counties owned the saloons and bought the whisky, and liquor was dispensed only in bottles done up in packages; nothing could be drunk on the premises and men had to have a permit of fitness to drink before the county dispenser could give them a bottle.

Prohibition, closing the dispensaries but allowing a gallon a month for private use, went into effect January 1, 1916.

DRUNKENNESS AND ITS PUBLIC COSTS REDUCED

In Columbia the quarterly bulletin of the State Board of Charities (Vol. II) showed that in the six months preceding prohibition (September through December, 1915) the cost of feeding prisoners at all the county jails in South Carolina was \$32,880; in the first six months after, the cost was reduced to \$24,092. There had not been any extra business prosperity in these last six months to account for this falling off.

From the city jail we got the following:

	1914 (wet)	1915 (dry)	1916 (dry)
Total arrests	8,421	8,417	6,173
Arrests for drunkenness	1,008	1,006	341
Drunk and disorderly	979	789	365

Some people said, "Oh, the men in 1917 were more prosperous and so more paid their fines and got off, and that accounts for the decrease." So I got the fines paid for these years, thus:

Number of fines paid, 1914, 3,832.

Number of fines paid, 1915, 3,262.

Number of fines paid, 1916, 2,780.

Honestly, everything pointed, not to prosperity as the main factor in decreased arrests, but to prohibition which closed the dispensaries, thereby making liquor less accessible.

In Charleston, South Carolina, we found the same decrease, thus:

The number of persons committed for drunkenness to the Charleston county jail, 1915 (wet) was 432; 1916 (dry), 237.

In Charleston, the hospital where the poor go showed a large decrease in cases of alcoholism; also in emergency cases.

PROHIBITION IN THE OLD DOMINION

From Columbia we went to Richmond, Va. If any one wants to make a real survey of prohibition, Richmond is admirably suited to their purpose. Richmond is a modern, unhomogeneous, industrial city, and it has kept records, so that you do not have to compare the year before and after prohibition. You can get long stretches.

SOCIAL WASTE REDUCED

I went to record after record, and had I known nothing of the facts, I should have been forced to see that something out of the ordinary had hap-

pened to Richmond in the months of November and December, 1916. War prosperity had been coming to Richmond gradually, but it did not come with a sudden bump in November, 1916.

But prohibition did; and in the first month, prisoners in the county jails of Virginia decreased 49 per cent; in the second month, 50 per cent.

In Richmond, institution after institution showed a sudden decrease in inhabitants.

The average number of prisoners at the state prison in Richmond in the month of December, for the five years before prohibition, had been 97. The first December under prohibition (1916) it was 70; for the same periods of January (average for five years) 42.6; first January under prohibition, 22. February showed a reduction from an average of 58 to 35.

November 1, 1916, the day prohibition began, the number of convicts and jail-birds on the road force was 1,697; March 6, 1916, it was 1,412.

We went to the city home where they take the paupers, chronic alcoholics, etc. There had been no increase in drug fiends here and the records month after month showed decrease under prohibition over the years before, thus:

NUMBER OF INMATES CITY HOME

March 26, 1915 (wet), 325.

March 26, 1916 (wet), 341.

March 26, 1917 (dry), 286.

We went to the county jail and there again was the same decrease:

NUMBER OF INMATES COUNTY JAIL

March, 1915 (wet), 332.

March, 1916 (wet), 337.

March, 1917 (dry), 120.

At the splendid Juvenile and Domestic Relations Court we found that following prohibition, wife-beatings had decreased and non-support had greatly decreased.

As impressive as statistics, are the interviews with business men. Mr. Oliver J. Sands, the well-known banker, said, "Prohibition is the greatest thing that ever happened to Richmond."

Dr. Douglas Freeman, editor of the News and Leader, had fought prohibition, but both he and the owner of the paper, a conservative citizen of Richmond, were converted. "The benefits have been so marked," said Dr. Freeman, "and there was no business convulsion, but almost at once increased business and better conditions all around."

Judge Ricks of the Juvenile and Domestic Relations Court said, "Richmond voted wet, but I believe if it were put up to a vote today, Richmond would vote 2 to 1 dry. Prohibition has been an incalculable benefit to the poor."

Judge Crutchfield, who has been judge of the Police Court off and on for 45 years, said, "Put it down that Crutchfield voted wet as a rag, but if he had to vote again he would vote dry with a big 'D.'"

Dr. Buchanan, Secretary of the Associated Charities, said, "There cannot be two opinions. *Prohibition spells betterment all along the line. It is a genuine device for reducing wreckage that every state should adopt.*"

I think Dr. Buchanan has said it right. Whatever may have been the history of Maine, that went dry in 1851 and the virility of whose movement was sapped by the Civil War, there seems to be no doubt that given the anti-alcohol sentiment that we have today, prohibition does get enforcement even in cities forced to go dry against their will. This is not only true of Southern cities but of Western cities like Seattle and Denver. If there is a device for reducing poverty, crime, insanity and disease, for making better homes and thus building up a better race, certainly every state should institute that device. I cannot but believe that there is rising in the East enough understanding of the dangers of alcohol to get similar enforcement here, and I hope that Eastern states will soon follow the West and South in establishing prohibition.

I hope this all the more now that we are at war, for in union there is strength and the West and South for the most part want a dry war, and resent the fact that the East wants a wet war.

* * *

THE WAR COST OF DRINK FROM AN AUSTRIAN POINT OF VIEW

One of Austria's physicians, Dr. Max Joseph Retzger, has had opportunity to see at the front the effect of alcohol on the soldiers' strength and power of resistance, and also as a promoter of the venereal diseases whose prevalence is regarded as a serious menace to the nation's future as well as an enormous drain on its present fighting strength.

In an address before the society of which he is the head, The Austrian Catholic League of the Cross, Oct., 1916, Dr. Retzger gave the results of his experience with alcohol, portions of which translated are here presented. He views the war, of course, from the Teuton standpoint, but the alcohol factor is serious in any army.

IN the matter of the fighting strength and endurance of the army alcohol plays a double rôle and I would add, an ominous one. I have been out in the field a year and can bear witness from my own experience and personal observation that alcohol shatters the resistance of our soldiers.

Wherever it is a matter of holding the nerves tense, of concentrating the will power for hours and days, there the effects of alcohol are highly injurious, as physiology and experimental observation during recent years have clearly demonstrated. The poison may, indeed, call out once, for an instant, a high tension of the nerves, but experience shows that reaction sets in in a few minutes and the paralyzing or impairment of the power of resistance lasts for hours.

Even at this stage of the war, while the enemy is planning our exhaustion by repeated attacks on all sides, everything depends upon holding our power of resistance and well, undiminished, not only for hours and days, but for weeks and months. Any one may observe that at the front the alcoholic breaks down quickly under the terrible drum fire, but it is also evi-

dent that the soldiers accustomed to the use of alcohol are not equal to abstainers in sustaining the continuous shock and strain.

This has already been pointed out by the German department of military hygiene, which proved that the sober soldiers resist strain more easily than others. And the experience of the war has demonstrated this a thousand times over.

The state of health, particularly that of the nervous system, suffers material impairment from the effects of alcohol, as Dr. Pontoni, of Gratz, proved very recently by a thoroughgoing investigation in hospitals.

ALCOHOL BREAKS DOWN MORALE

But the moral nature, particularly, the discipline of soldiers and officers, upon which everything depends for the outcome of the war, the consciousness of responsibility and the sense of duty are especially weakened by the use of alcohol. The German Emperor once said that according to his experience nine-tenths of all the transgressions that occur in the army and navy are due to alcohol.

Even if precise statistics attribute only from half to three-fourths of the offenses to alcohol this highly significant fact throws a glaring light upon the seriousness of alcohol as one of the inciting factors in the worst violations of discipline.

And this general observation applies especially to the second chief consideration in which alcohol in the field has a decided influence upon the outcome of the war.

THE COST IN VICE DISEASE IN TEUTONIC ARMIES

Hardly any factor is so important, scarcely any other gives so much cause for anxiety as the fearful increase of immorality in the army and the spread of venereal diseases. We have no exact figures giving their extent. But if we accept the calculations of Blaschkos, the best informed man on the conditions in Germany, we find that *the number of soldiers suffering from this cause reached 300,000 in the first year of the war.* How large the figures are now one may conclude from the increase which always accompanies war conditions.

(Figures showing the increase in former wars are here cited for comparison.)

It need not, therefore, surprise us that Dr. Finger estimates *the number of Austrian soldiers suffering from venereal diseases during this war at the truly fearful figure of from 600,000 to 800,000.* What this number signifies anyone can figure for himself. *Easily twenty army corps unfit for duty solely on account of immorality and its consequences, venereal diseases.* And I am leaving out of consideration here the fearful effects these diseases will have after the war upon hundreds of thousands of families.

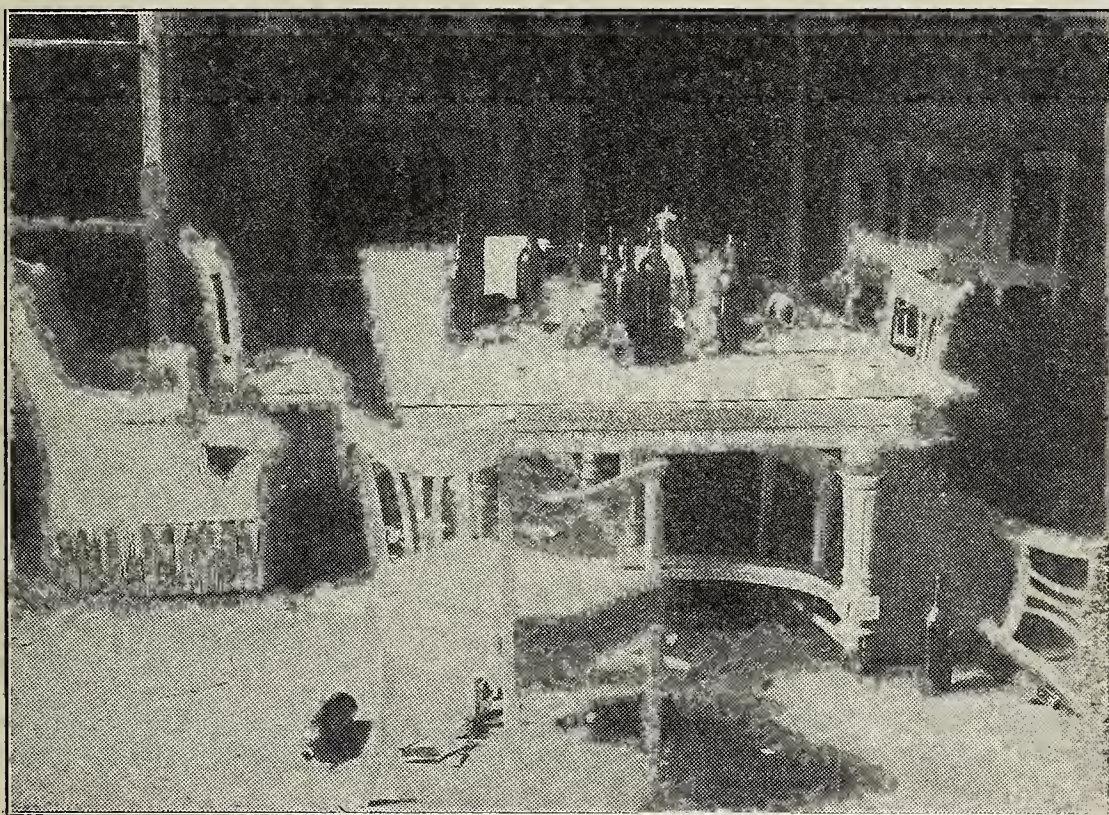
If we inquire into the reason for this dreadful condition we come to the nervous excitation of our soldiers. We may with truth and good reason lay the responsibility upon the insufficiently condemned temptations presented by the continuance and establishment of brothels which are not only not guaranteed against these diseases, but are direct breeding places for them.

We do not wish to belittle either of these reasons, but it may be expressly stated that without alcohol the extent of venereal diseases at the present time would have been impossible. There is no doubt that the great majority of young people would never overcome their natural timidity in facing the moral wrong of unmarried intercourse, particularly the fear of degradation which stands in the way of a first visit to a public house, if it were not for the alcohol which abolishes the protective inhibition of conscience and the fine aesthetic sensibilities.

Numberless times at the front I have seen the sad fact demonstrated that a visit to the saloon preceded, regularly, a visit to the brothel. The late Prof. Neisser, of Breslau, who stood next to Blaschko as an authority in the warfare against venereal diseases, reported his experience with thousands of soldiers who came under his treatment as venereal patients. "There was not one among them," said Neisser, "who did not excuse himself on the grounds of excitation through drink. How many there are," he adds, "who shudder when in a sober condition they realize to what they have given themselves up."

Neisser, who is a total abstainer, closed with these words: "Shun alcohol. There can be no doubt that in thousands and tens of thousands of cases venereal diseases would be avoided if it were not for the seduction of the cursed alcohol."

Still another shocking fact to be added to this experience: In Strassurg in 1912, on the Kaiser's birthday, the midnight mission stationed guards



A ROOM LEFT BY GERMAN SOLDIERS WHO OCCUPIED A BEAUTIFUL CHATEAU NEAR MALINES
AFTER THEIR DRUNKEN ORGY THEY STRIPPED THE CHATEAU

at the entrance to one of the streets on which there were numerous brothels. The duty of the guards was to try to dissuade the soldiers, by talking with them and by literature, from their errand. According to the report of the mission, in one hour, from half past 12 to half past 1, not less than 450 soldiers entered this street, and the stream continued nearly the whole night. In one and a half hours, in spite of the warning, 260 soldiers entered the houses. (First Lieutenant Heusch, in "The Alcohol Question in the Army," p. 46; "Volkswart," 1912, S. 52.) How many of these must have been again infected and had to be withdrawn from the service!

The following figures are submitted in relation to the correspondence between the frequency of the brothels and the prevalence of venereal disease. In 1915, in Gratz, of the 265 prostitutes on the lists, not less than 172 were admitted to the hospital for treatment for these diseases. Of 487 men treated for the same cause in one clinic, not less than 395 (81.1 per cent) had incurred the infection from professional prostitutes. (Gaulke, p. 8, according to Blaschko in "Prostitution in the Nineteenth Century.")

The preceding statements are sufficient to show the importance that sobriety and abstinence have for the army. They mean an increase in physical and moral resistance and an enormous decrease in the venereal diseases and immorality which sap the strength of the army.

THE STRANGLE-HOLD OF CUSTOM

The facts here stated are known to the army heads. Why do they give so relatively little consideration to them? Because the customs and the opinions which stand under the curse of alcohol are so deeply rooted among our people, even of the highest circles, that scarcely anyone knows how to break their power. Because in time of peace the declarations that were made about alcoholism and its consequences were regarded as exaggerated, so now it is thought that in war-time it will not be possible to break down these existing prejudices and bad habits, but above all is the desire to keep the army in good humor.

In these things prohibitions and orders can only be enforced when they are supported by the opinions and example of all influential circles and are at least slightly understood by the masses. That preparation for such understanding has not yet been made is evident from the way many orders have been carried out. I cite only the one forbidding the delivery of alcoholic liquors in railroad stations, the enforcement of which left much to be desired.

COUNTERACTIVE ARMY WORK NECESSARY

The urgent task which the war places upon the military authorities is, therefore, first of all this:

1. Organization for instruction concerning the uselessness and the injuriousness of alcohol, by means of lectures and instruction of all kinds, and particularly by the example of the higher officers.

2. Provision for substitutes for alcoholic drinks by furnishing pure drinking water and mineral water, fruit juices, hot beverages like tea with

lemon, coffee, etc., and, first of all, a reform in the total dietary of the army which from the beginning of the war has been too one-sided in providing a disproportionate amount of meat, which naturally must arouse a desire for alcoholic liquors. The diet would be greatly improved by more vegetables, and this would not be without influence upon the problem of morality.

FOOD WASTED IN DRINK

Aside from the moral side of the question which is of equal importance for the people at home as for the front, there is the consideration which is of most importance to the people at home. For the army the first question is endurance, for the home it is economy. Although it may sound like mockery, it must be emphasized that in many circles our people do not yet appear to be sufficiently conscious of the fact that we are threatened with hunger; we are in the position of a besieged fortress. The matter of greatest urgency is, therefore, care in providing sufficient food for all of the people and the equitable distribution is a most imperative duty, so that all shall take part to the same extent in the sacrifices and deprivation which the war necessitates. The facts in the case appear like irony in relation to both of these requirements. I must, however, refrain from making other specifications in this comedy of errors than the relation between the food question and the alcohol question.

[Here follows a section on the waste of food material in the production of alcoholic liquors, a subject with which the readers of the JOURNAL are already familiar.]

DEMOBILIZATION PROBLEMS

After the war! Our thoughts and hopes go forward to the future, to the time when this fearful war will be at an end. But have we reason for any great hopes at that time? One needs to be no prophet to foresee what will happen. When our soldiers return with their overwrought nerves, after years of absence from wife and children, leaving unbelievable experiences, want and horror behind them, there will be great celebrations. There will be, indeed, much sorrow mingled with joy, there will be little occasion for any special jubilee of victory, but the jubilee of peace will drown all other feelings. Who can doubt that if alcohol enters as usual into such celebrations there will be orgies of drunkenness with their accompanying crimes and immoralities?

Truly this shame ought not to come upon our people and lower us in the eyes of all Europe. To avoid it ought to be the sacred task of all society, and particularly of the authorities. The alcohol-free mobilization in Germany showed what the military authorities can do in this direction. If there were military reasons at that time for a complete prohibition, so will there be in the interests of morality during demobilization and joyful celebration. For the first month of peace, at least, there should be total prohibition of alcohol. We have confidence that our military authorities will furnish our people with such a prohibition which will receive the heartiest approval of all friends of morality.

[The address closes with predictions of the increased work there will be in taking care of inebriates, and the necessity of abstinence teaching and training for the young.]

A FRENCH RECKONING OF A GREAT WAR LOSS

Alongside the picture of the swift increase of vice diseases in Germany and Austria given by Dr. M. J. Retzger (page 241) should be placed an article by a physician in LA PETITE REPUBLIQUE (Paris, March 14, 1917). It is largely based on facts collected by Dr. Thibierge in a new work, "Syphilis and the Army," which is a part of a collection of medical facts growing out of the war. The writer declares that the time has come for plain speaking, and that the public should know the dangers which the country and the race are incurring from the enormous increase of cases of venereal diseases and especially of syphilis.

The facts given by this French physician are not pleasant reading, but since some hundreds of thousands of American boys are in France or soon to be there, it is just to them and the homes to which they will return that the dangers awaiting them in this respect should be known, since French physicians themselves are giving warnings. Couple with these conditions, the fact stated by Jean Finot in his recent work on alcoholism that France has one drink shop to every eighty men, women and children, and the reasons for warning American soldiers of the dangers in liquor and vice temptations both in America and France are apparent.

"THE frequency," says Thibierge, "of syphilitic infection in the French army, among workmen in the war material factories, in the civil population with which the soldiers and mobilized workmen mingle, has made a veritable epidemic of disease and one of the most widespread of epidemics."

Contrary to most diseases contracted in armies, continues the medical correspondent of *La Petite République*, syphilis is one of long duration; its effects are felt by the victim for many years; by his descendants for many more. On natality and infant vitality, on the quality of the race it has a profound and deadly influence and is in the front rank of factors of depopulation. All great movements of peoples—wars, pilgrimages, expositions—provoke a recrudescence of infectious diseases in general. The venereal diseases in particular increase in frequency in all wars.

The present world war, because of the immensity of the armies, the formidable displacements of troops and of population, particularly the mental condition created by the length of the struggle, the incessant dangers incurred by the soldiers seems far to surpass former wars in the matter of extent of venereal diseases.

Dr. Pantrier in a report, July 13, 1916, estimated that already the number of cases of syphilis in the war had risen to some 200,000 men. [This evidently refers to the French army. For German and Austrian figures see page 242.]

I leave to the imagination and calculation of the reader a conception of the results of these 200,000 agents of contamination who, if they are not watched over and warned of their terrible rôle, continue without change their normal life.

The object of this article is to show the dangers we expect at least from allowing this to go on. More than ever it is necessary to avoid all weakness, in view of the increasing number of venereally infected men and

women whom we not only meet casually, but who infect us and poison us and our future children.

Syphilis is everywhere—this must be known; it must be repeated. Every indulgence incurs the risk with unheard of frequency of acquiring this terrible disease.

I shall content myself with pointing out some of the agents of contamination.

Take, for example, the soldier, and the soldier is all of us, in his life at the rear where he finds himself perhaps in a garrison or on leave. Take him at the front, in the army zone, and also in the intermediate zone.

Listen: Thibierge, from the Statistics of Solivet, Carle and Tzanck, shows that soldiers from the front most often contract these diseases either at the stations before going back to the front or while on leave.

"Those on leave," says Dr. Thibierge, "have various opportunities to contract venereal diseases; from the moment when they leave their unit they pass through the cities of the intermediate zone where syphilis is raging; they stop at junctions or transfer stations, often in Paris, where the vicinity of the stations swarms with women of all sorts. I have it on reliable authority that men have been infected, even in the train which was taking them away on leave or was bringing them back, by women who go back and forth on the trains and succeed in avoiding inspection."

At the destination, clandestine prostitution in cafés, brewhouses and other places is an agent of more infirmity and death.

One easily understands how rapidly the contamination of the women who stay in the army zone is accomplished, and they in their turn disseminate "the evil," and if in the interior professional prostitution plays the chief rôle of distributor, in the army zone, the venereal diseases are most often disseminated by women who are not professionals; they come especially from those whose profession brings them into touch with the soldiers—café proprietresses, girl waiters, laundresses to whom the soldiers send their apparel, seamstresses to whom they give garments for mending, etc., not excepting, be it understood, the other women of the lower bourgeois or farmer class, because there is no social situation which *a priori* can be said to be beyond suspicion of syphilis.

In the factories the mingling of the two sexes is, from all the evidence, one reason for the formidable increase of disease.

Further, the arrival of a large number of laborers and workmen of native races constitutes a new factor of propagation. So much the more dangerous because many of these men need extremely little money for their food and consequently dispose of relatively large sums in excesses.

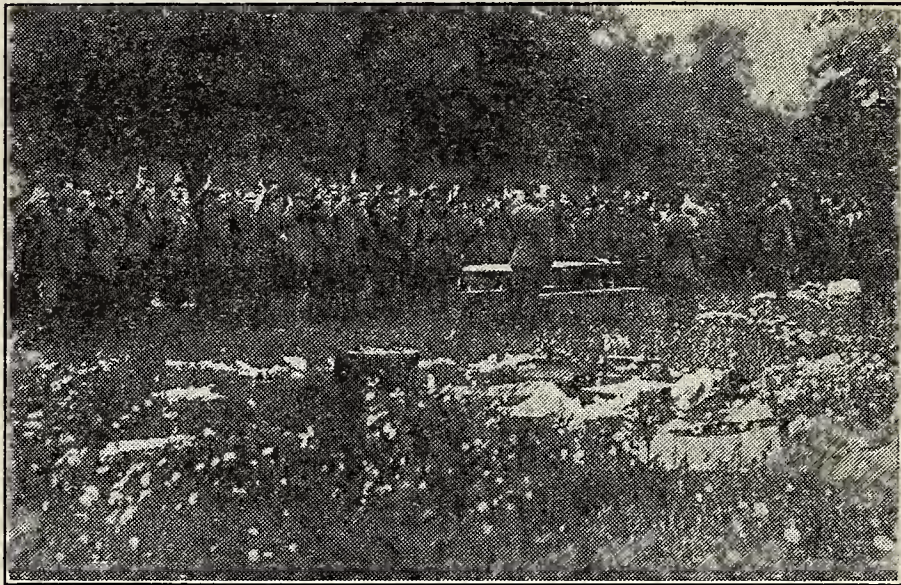
In the opinion of all physicians the number of recent syphilitics is continually increasing both among the soldiers and the civil population—to such a degree that one fact since the outbreak of the war has impressed all physicians—the frequency of syphilis on young people. And, alas! what


was a rarity has become common among young men 18 years of age and even of 16 years.

Here is where we are! And syphilis is a terrible disease, the gravity of which for the family, the country and the race I shall show in another article.

* * *

COLUMBIA'S SONS RESPOND



**"CLEAN HANDS AND CLEAN LIVES
OFFERED WITHOUT RANCOR
FOR A CLEAN CAUSE."** 

Substance of Code of Engineering Corps From University of Minnesota.

Copyright, The Scientific Temperance Federation, Boston
Photograph Copyright, Underwood and Underwood

From the New Series of Stereopticon Slides, "The Warrior's War Against Drink"

We undertake to maintain our part of the war free from hatred, brutality or graft, true to the American purpose and ideals.

Aware of the temptations incident to camp life and the moral and social wreckage involved, we covenant together, as members of the various camps represented, to live the clean life and seek to establish the American uniform as a symbol and guarantee of real manhood.

Realizing the importance and position of the standard of the Christian life, we promise to do our part as private soldiers, or in any official position we may hold in the United States army and navy to carry out those principles and to exert the same influence as far as possible upon those associated with us.—Pledge taken by some hundred soldiers, sailors and training camp men in Presidio, Cal.

A WORD TO JOURNAL READERS

THE current number closes the twenty-sixth volume of the JOURNAL. Beginning as an octavo eight-page periodical in 1892 called the *Monthly Advices*, designed to convey teaching helps on the subject of alcohol and other narcotics, the form of the publication has gradually changed until it has reached its present attractive magazine size. In 1894 the *Monthly Advices* was enlarged and became *The School Physiology Journal*, under which name it was published during the lifetime of its founder, Mrs. Mary H. Hunt, and for some years thereafter. In 1909 the name was changed again to the one which it now bears. In 1912 the size was doubled from 16 to 32 pages, and this year has seen the transformation of the JOURNAL into a quarterly of 64 pages.

The JOURNAL as now published aims to bring to its readers the best information available on the scientific, social and economic phases of the alcohol question, on educational methods and to serve as a quarterly review for busy people of what has been published on these points in the books and periodicals of various countries.

The annual index which appears in this number, if filed with the copies of the JOURNAL itself, would be a ready source of information to many who now turn for that information, which perhaps has already been published, to the busy offices of temperance organizations. Especial attention is called to the "References" in the index where the contents of the JOURNAL for the year are indexed topically, so that whatever has been published on a given subject during the year may quickly be found by references or cross references.

Through publishers and correspondents in the few still neutral countries the JOURNAL has been able to obtain this year much information about what is going on in the war countries in regard to the alcohol question, even in the lands now classed as enemy countries. One article in the current number presents some of this material and others will appear later.

The JOURNAL is far yet from fulfilling the ideals of its editors, but it has a place of its own in the literature of the alcohol question in America, which, it is believed, should make it of increasing usefulness to all thoughtful readers who desire to keep abreast of world progress in this great movement of social reform.

* * *

WHERE AMERICA LAGS ON THE BEER QUESTION

GREAT BRITAIN reduced the manufacture of beer this year to 50 per cent of the production of the last normal year.

In Germany the production authorized for this year was reduced to 25 per cent of the normal output, except in Bavaria, which is permitted 35 per cent. In Austria, as long ago as last March, the use of barley for making beer was prohibited and the sale of beer much reduced. The sale of spirits was forbidden in several parts of the country.

While this reduction has gone on among our allies and even in the

Teutonic nations, the United States continues to permit the sale of spirits and has as yet put NO restriction on the manufacture of beer.

With a world shortage of foodstuffs, the other nations have at least materially reduced the waste of them in beer. The United States has taken no national action of this kind. As long as we fail to do this, we cannot properly make the complaint voiced in some quarters that we ought not to be asked to save grains while our allies are making them into beer. We ourselves are making our full amount of beer. The whole waste ought to be stopped, but the United States as yet has not taken even the war measures of reduction of beer employed by Great Britain, Germany, Austria and other nations.

* * *

THE NECESSITY FOR HEALTHFUL RECREATION

THE care the United States government is taking to safeguard the health and morals of the soldiers in the present war is in striking contrast to the "let alone" policy of former wars. Equally radical also is its action in accepting the cooperation of civilians in helping to provide healthful recreations for the mental relief of the soldiers.

Out of this experience when the war is over we may hope to see an awakening to the social needs of the great army of industrial workers, the boys and girls in shops and offices, whose health and efficiency are all important to the welfare of society.

With the exception of a few benevolent societies, the policy of "let alone" in the matter of promoting healthful social opportunities has had similar effects in civil life as in army life. Commercialism in the form of liquor and vice has taken charge and run things for its own ends. Result, disaster, moral and physical, to thousands who might have been saved if their needed recreation had been properly safeguarded and supervised.

A recent number of the *Bulletin* of the New York City Health Department contains this suggestion quoted from a work on efficiency and fatigue in British munition factories. It confirms the carefully formed conclusions of Miss Miner in "The Slavery of Prostitution" (page 282):

"Recreation is a necessity for munition workers, and special provision should be made for the large numbers of women and girls away from home and friends. Especially should the leisure of the week-ends be provided for, so that the benefits which proper rest and recreation afford may be secured. This important matter cannot be left to chance. If opportunities of wholesome amusements, refreshment and recreation are not provided the public houses and less desirable places of entertainment may benefit, but everyone else suffers.

"The committee suggests that steps should be taken, if possible, in co-operation with the local authority, to organize (preferably with the assistance of a committee of the munition workers themselves) recreation on a scale sufficient to meet the needs of large numbers. 'Winter gardens' and

cares for refreshments, music, dancing, etc., are attractive, and full use should be made of all public halls in winter and parks and open spaces in summer for entertainments, bands and sports. Philanthropic and other societies should be encouraged to open small clubs in various parts of the town, so as to be easily accessible to tired workers, who do not always want to journey to the center of the town for amusement during their leisure. Well-to-do residents may often be found willing to contribute their share by offering hospitality in their own houses on Saturdays and Sundays to parties of women and girls and to allow the use of their garden in summer.

"The encouragement of sobriety among the population is an important branch of the welfare work."

* * *

JUST LIKE THE OTHER FELLOW

ONE of the army chaplains writing from his post refers to the exceptionally fine type of young men who have been called up into the new army:

"The vast majority do not drink, nor are they wanton. So many of my boys are white, fine and noble, and know what they are fighting for. Real men they are, not surpassed in courage, character and devotion by any in civil life." (*The Congregationalist*, Oct. 11.)

Probably there was never a time when the War and Navy Departments of the United States took such pains as now to make conditions such as to help these young men keep sober and decent if they will.

But drink forbidden to the army is proving troublesome from civilian sources. It would not be strange if some soldiers should resent being singled out in this matter while drink is left to the civilians on whom the army must depend for support. Dr. W. A. Evans, writing in the *Chicago Tribune*, relates that among the regulars and militiamen whom he interviewed on the border in 1916, he found a disposition to accept as an army measure the prohibition of liquor to the soldiers, "but they do object to being singled out." If liquor is to be denied them they want it denied to the other fellow. "If prohibition promotes efficiency and health in an army, it also promotes them in the men who clerk, sell goods, work in factories, raise crops, argue in court and practice medicine. They don't want to be singled out as exceptionally bad, wicked or weak. They do not want to be held up as exceptionally in need of protective care. They want to be treated just like the other fellow."

Sooner or later the nation will have to accept the logic thus expressed in a current war-time jingle:

"The law for the soldier and law for me
Are not the same, but they ought to be;
It says to him no whisky or beer,
Let's make it the same while war is here."

Science and experience and fair play demand for national well-being and

the highest effectiveness that drink should be put away from all classes, from the army for the sake of the soldier who never has been a drinker and who should not be pressed with drink temptation, and for the soldier who has been a drinker but who must be kept fit for his high service; from the civilian whose money and best efforts are just as much needed as the soldier's in winning the war for liberty.

* * *

THE WOMAN PAYS

EVERY woman who uses or countenances the use of alcoholic liquors ought to be made to read some of the accounts that have been published of the deeds of drunken soldiers in the paths of the present war. All the world knows what happened to the women of Belgium when the soldiers had sacked the wine cellars. The part that alcohol played therein should never be left out of the account. And particular emphasis falls upon the alcohol in view of recent reports of similar happenings in Galicia, where it was Russian instead of German soldiers who committed the atrocities.

We read in the papers not long ago of the trick played by the Germans when they were driven out of a town by the Russians. They left behind quantities of liquor as a means of tempting and demoralizing the Russian soldiers, and we read that it worked.

It has remained for a German paper (*Berlin Deutsche Warte*, September, 1917), copying a Russian report, to tell how it worked, and that the real victims were the women. Not a grey-haired woman nor a child over eight escaped, the report states, and mutilation and murder were added to the horrors.

Be it noted, however, that it is recorded, to the credit of the Russian officers, that they made heroic efforts to stop the orgies and finally succeeded by bringing in the Cossacks to subdue their own men.

These terrible results from alcoholic liquors should fire every woman the world over to combat them with all the grim determination displayed by the Russian Regiment of Death.

We have heard of men who, when raising their glasses to their lips, have been held back by seeing in imagination pictures of mother, wife or home whose happiness that drink menaced.

But every woman tempted to touch a cocktail, a glass of wine, or any other form of alcohol, ought to be stayed by a knowledge of the hideous transformation it can work in human beings, and that the worst sufferers from all its worst effects fall upon her own sex.

* * *

BEER AND FRIGHTFULNESS

THE charge that beer is brutalizing is not made for the first time by Prof. Reginald Daly, of Harvard. Nearly 20 years ago, Dr. Forel said that beer drinking at the German universities was killing idealism and begetting an incredible vulgarity.

Dr. John Todd, of Pittsfield, Mass., testified before the Massachusetts

State Legislature years ago that while "beer is not so intoxicating, it is awfully demoralizing. Our beer drinkers become besotted. Beer makes them cross. It makes their homes unpleasant. It prevents them from rising in civilization."

The *Pacific Medical Journal* also during the early discussion of beer in this country said that of all intoxicating drinks it is the most animalizing. "It dulls the intellectual and moral and the sensual and beastly nature. Beyond all other drinks it qualifies for deliberate and unprovoked crime. A whisky drinker will commit murder only under the direct excitement of liquor—a beer drinker is capable of doing it in cold blood."

The *Scientific American* added to the discussion by saying:

"It is our observation that beer drinking in this country produces the very lowest kind of inebriety, closely allied to criminal insanity. The most dangerous class of ruffians in our large cities are beer drinkers."

And an individual confirmation was contributed by a poor woman who said of her husband: "When he drinks whisky, he gets stupid; but when he drinks lager, he runs after me with a knife."

Right in line with these recorded observations, therefore, is the hypothesis offered by Prof. Daly cited in the September *Munsey's Magazine*, 1917, "that lifelong drinking of mild beer has been one of the most potent causes for the amazing brutalities of official Germany. These crimes have been ordered by men who for decades have been poisoned by beer. In times of peace and quiet, the poison causes derangement of brain tissue, often expressed merely in some form of sentimentality, plain or maudlin. If, however, the victim is put under stress, his nervous disorder is likely to lead to bad temper and bad judgment, with endless possibilities in the way of loss of dignity, poise, and the sense of human fellowship."

To the hypothetical retort that as much alcohol *per capita* is drunk in England and France as in Germany, he answers:

"The Germanic peoples are the only great group who feed alcohol to babies or very young children of the middle or upper classes. If the baby has not been already prenatally damaged because of beer drunk by his mother, he still runs the risk of poisoning from the alcohol-bearing milk of a drinking mother or wet-nurse. The child grows to manhood, drinking alcohol and continually handicapped in his development and cerebral, and therefore moral, control.

"On the other hand, nearly all the alcohol drunk in France and England is consumed after the formative years of childhood—distinctly lessening the danger of permanent cerebral degeneration. The drunkards of France and the British Isles are, as elsewhere, brutal and mean; but, fortunately for the good name of the governments of these two countries, many men of the ruling classes, the men who issue orders, are not addicted to the daily use of alcohol, either in youth or maturity."

Dr. Hoppe, of Germany, in his pamphlet on the effect of German beer-drinking, written more than 15 years ago, gave detailed confirmation of

Prof. Daly's statement concerning drinking among German school children.

The school children of 15 years ago are in the army today. The university students described by Dr. Forel 20 years ago are men of affairs in Germany today. "Frightfulness" is a logical result of the failure of high ideals under the brutalizing effect of beer, noted by both Dr. Forel and Dr. Hoppe.

* * *

REPORTS THAT DO NOT HANG TOGETHER

THE old plea that there is less intemperance in countries where beer or wine is the usual beverage than where the leading drink is whisky or gin is reiterated in a letter by Everett P. Wheeler in the "Readers' View" column of *The Outlook* (Aug. 15). He claims there is less drunkenness in Paris or Berlin than in Liverpool or Glasgow.

If the emphasis is all to be thrown on the word *less*, the writer might be able to establish his point after long and patient research. But the important matter is, are the beer and wine countries hampered or threatened by intemperance in any serious degree? That question is quickly answered by turning to their legislation. Among Germany's numerous "*Verbotens*" are many dealing with the "*Trinker*" and drunkenness. And France has only recently reaffirmed her law against allowing drunkenness to be seen in public places. (See page 273.)

We have more than French legislation, however, to correct the continuous false assertions that wine countries are not troubled by intemperance. The June and August numbers of *La Revue* (Paris) contained articles on "King Alcohol" and "The Passion of Our Lord Alcohol," which paint unmistakable pictures.

The June number states that since the beginning of the war alcoholism among women and minors has become alarming, and criticises the government for the inadequacy of its measures for dealing with it. In the August number the writer urges removing alcoholic liquors from their present position of menace to the soldiers of the allies who have come to France, especially the American soldiers. He does not, however, include wine in his recommendation. He is one of that large number of people in France and out of it who do not yet realize that the craving for the stronger liquors is started by the weaker drinks.

* * *

FRANCE'S TWO DANGERS

JOHN GALSWORTHY writes in *The Fortnightly Review* (September) of what he saw in France in 1916-17 while spending some time in hospital service. Of admiration and sympathy there is no lack, so that what he records is in no spirit of unkindly criticism. Nor has he preconceived no-

tions, looking for facts to support a theory. Here is a paragraph:

"Then there is the 'farmeress' at the home farm that gives the hospital its milk, a splendid grey-eyed creature, doing the work of her husband who is at the front, with a little girl and boy rounder and rosier than anything you ever saw; and a small one-eyed brother-in-law who drinks. My God, he drinks! Any day you go into town to do hospital commissions you may see the hospital donkey-cart with the charming grey donkey outside of the Café de l'Univers, or what not, and know that Charles is within. He beguiles our *poilus*, and they take little beguiling. Wine is too plentiful in France. The sun in the wines of France quickens and cheers the blood in the veins of France. But the gift of wine is abused. One may see a poster that says—with what truth I know not—that drink has cost France more than the Franco-Prussian war. French drunkenness is not so sottish as our beer and whisky fuddled variety; but it is not pleasant to see, and mars a fair land."

Further on another passage contrasting French and English viewpoints:

"France, be warned in time by our dismal fate! Don't lose your love of the land; don't let industrialism absorb your peasantry, and the lure of wealth and the cheap glamour of the towns draw you into their uncharmed circle. We English have settled deep into a paradise of machines, chimneys, cinemas, and half-penny papers; have bantered our heritage of health, dignity and looks for wealth, and badly distributed wealth at that. You were trembling on the verge of the same precipice when the war came; with its death and wind of restlessness the war bids fair to tip you over. Hold back with all your might. Your two dangers are drink and the lure of the big towns. No race can preserve sanity and refinement that really gives way to these."

* * *

SEES DANGER TO AMERICAN ALLIES

JEAN FINOT, editor of *La Revue* (August, 1917), says:

"It is not enough to show our enthusiasm regarding the allies who are among us. We must also watch over their moral security. Alcoholism menaces all. The 'Teddies' who arrive from the United States total or partial prohibitionists are exposed to multiple dangers and temptations.

"We shall commit an evil action if America's children find themselves exposed to the danger of being poisoned by alcohol.

"We cannot lay too much emphasis upon the decree issued by the British military authority, January 15, 1917, prohibiting the circulation of alcohol in all the French regions occupied by the English army. And this 'in order to respond to the declarations of civil and military authorities signaling alcoholism as an obstruction to the agricultural and industrial production required by the necessities of national defense.'

"Shall we wait until the American, too, perhaps, shall inflict a like humiliation upon our ministers of the interior, of supplies and many other of their confrères?"

HUMAN WAR PROBLEMS

ONE WAR SAVING BY PROHIBITION

THE secretary of the Canadian Military Hospitals Commission who recently visited New York, said, in *Health*, that "the problem of the returned soldier was cut in half where prohibition prevailed." It made generally impossible carrying out the popular desire to "fill up" the returned soldier. Earlier in the war the problem was so serious the commission thought of starting an inebriates' homes. Prohibition and the removal of the trouble made this unnecessary. In Ontario the jail population became so reduced by prohibition that the authorities took over one reformatory for a convalescent hospital.

* * *

WHERE PHYSICIANS' KNOWLEDGE WOULD COUNT

PHYSICIANS are earnestly urged editorially by the *Long Island Medical Journal* to "do their bit" by warning the public, and especially the young men going into the army, of the danger in incurring vice diseases.

* * *

GUARDING THE SOLDIER'S MORALS

IN an editorial on safeguarding the soldier's morals, the *Journal* of the Missouri State Medical Association (Sept., 1917) says: "The influence of liquor on the actions of men is most pernicious in that it lessens resistance and restraint. When the temptations of liquor and vice are deliberately flaunted in the faces of such men (in barracks) when away from camp or on furlough, the consequences are found to be grave."

* * *

IF YOU ARE CALLED TO THE COLORS

WHILE on the subject of sweets, says Henry Rood (*Everybody's Magazine*, Sept.), a word is advisable to the man who has been in the habit of using beer, ale, or other alcoholic beverage in his life as civilian. Under the law approved May 18, 1917 (Section XII), the sale of intoxicating liquor, including beer, ale, or wine, is forbidden to any officer or member of the military forces of the United States while in uniform. And from the time you are called to camp until mustered out at the end of the war, you will be in uniform. Furthermore, the army has means of identifying those who violate this law, either openly or by smuggling "wet goods" to men. A saloonkeeper is not likely to sell a soldier a glass of beer for five cents when he knows that by doing so he faces a fine of \$1,000 and imprisonment for 12 months, or both penalties. It wouldn't be profitable for the saloonkeeper, or for his bartender—for the law of May 18 is so worded as to nail them both at the same time.

This particular law does not impose any new penalties on the soldier who buys and consumes a drink. It strikes at the root of the matter by punishing the sale itself so hard that few dealers would care to take the risk involved. As for the soldier, it must be remembered that army regulations amply cover his end of the matter. In times of peace, if he is found intoxicated *when off duty* he is extremely likely to be fined 15 days' pay—to have to work for Uncle Sam as hard as possible for two weeks, and then hand over his wages to the government. In times of peace, also, a soldier tried and convicted of being drunk *when on duty* may be imprisoned at hard labor for six months, and fined two-thirds of his pay for that period. In times of war intoxication brings severe punishment.

Therefore, it is that the man who drinks moderately in civilian life may find it a hardship, at first, when his usual beer or ale or other alcoholic beverage is suddenly and automatically shut off. If you happen to be such a man, commence now, at once, by cutting out beer or wine, or whatever you are in the habit of drinking. You might as well get over the hardship before you go to camp as afterward, when you will have a good many other new things to put up with. Probably you will turn to sugar in some form, like sweet chocolate, to relieve the desire for alcoholic stimulant. Many soldiers have done so, and are doing so today, and that is one reason why certain post-exchanges sell enormous quantities of candy and other sweets. Army life is not what it used to be in Civil War days, or much later, so far as liquor is concerned. In fact, those who go into the United States army under present conditions are not nearly so likely to become drinking men as if they remained in civil life.

In former times it used to be said that "drink had the army"—not merely our army, but almost every army. Nowadays, however, the army has drink by the scruff of the neck and on the run. This perhaps is the most notable step forward in the development of Uncle Sam's fighting forces. Only one other step of anything like the same importance remains to be taken—that of protecting the soldier from vice, and this is largely a matter of educating the men to realize that they must avoid such pestilence as they avoid cholera or smallpox. One is not more dangerous than the other.

* * *

WAR DEPARTMENT ADVICE TO THE SOLDIER GETTING READY FOR CAMP

THE War Department issued during the summer a course of 30 daily informal lessons to men selected for service in the national army with a view to helping them get started in the right way. The lessons were published in the daily papers. Among the suggestions of Lesson 4 were the following (*Boston Record*, August 16):

"There are some simple rules of eating and living which will be especially helpful to you if you put them into practice in preparing for camp life.

"Perhaps the most important of these rules is to use no alcohol of any kind.

"If you have been in the habit of smoking immoderately, cut down; get your wind, your nerves and your digestion into the best possible condition.

"Don't 'take a last fling.' It may find you in the hospital. At the best, it will probably bring you into camp in an unfit condition to take up your new duties with profit and enjoyment."

* * *

SOME MILITARY DISADVANTAGES IN TOBACCO

TWO kinds of work called for in the new American army—bayonet work and bomb throwing—are represented in the results of some recent tests of the effects of smoking reported by Dr. George J. Fisher and Prof. Elmer Berry in "Physical Effects of Smoking" (see also page 285).

Muscular work such as is involved in the use of the bayonet was tested with 14 young men leading healthy, active lives, seven of whom would be classified as moderate smokers as they never smoked more than twice a day; the other seven were non-smokers.

The test consisted of five thrusts with the foil in true fencing style at a target 15 inches in diameter placed on the wall shoulder high.

The averages of the five scores were taken and recorded for each man before smoking.

He was then allowed to smoke his two cigars. The target test was repeated and the average of the five thrusts again recorded.

Ten such experiments were recorded, the scores totaled and averaged. The men were then asked to refrain for two weeks from tobacco in any form. A series of five experiments was then taken, similar to the foregoing, except exercise in the form of 20 jumps over a stick took the place of the smoking.

PRECISION IN THRUSTING IMPAIRED

The results were as follows:

1. All smokers showed a loss in physical precision (thrusting at a target) immediately after smoking.
2. Five of the seven smokers showed improvement during the interval when not smoking.
3. Non-smokers showed the greatest loss in physical precision after smoking. They also showed a slight gain in their records of precision as the tests went on, due, the experimenters believe, to experience with the apparatus.
4. In tests of nerve and muscle control following exercise, smokers showed a greater lack of control, while all non-smokers showed improvement in control.

Thus in tests similar to bayonet work precision was impaired after

smoking and when the tests in control were performed after other physical exertions the habitual smokers had a power of control inferior to the non-smokers.

PRECISION IN THROWING IMPAIRED

A second group of tests was performed with baseball throwing. The New York Health Department commends a study of them to the soldiers who contemplate throwing hand grenades.

Twelve men were tested, smokers and non-smokers, all ball players. Official league balls were used. The target at which the ball was thrown was a padded block, five feet square, with a bull's eye one foot in diameter, surrounded by concentric circles six inches apart. This was suspended at such height that the bull's eye would be approximately at the height of an ordinary man's shoulder. The distance of the throw was 60 feet.

The results were as follows:

In Test A, during which one cigar was smoked, the *smokers* showed a loss of 11 per cent in accuracy when pitching a baseball, after smoking.

In Test A, during which one cigar was smoked, the *non-smokers* showed a loss of 13 per cent in accuracy when pitching a baseball at a target, after smoking.

The average loss in accuracy during Test A for both *smokers* and *non-smokers* is 12 per cent, after smoking.

In Test B, during which two cigars were smoked, the *smokers* showed a loss of 11 per cent in accuracy when pitching a baseball at a target, after smoking.

The *non-smokers* in Test B showed a loss of 18 per cent in accuracy when pitching, after smoking.

The average loss in accuracy after smoking during Test B, for both *smokers* and *non-smokers*, is $14\frac{1}{2}$ per cent.

In Test C, during which *no cigars were smoked*, the *smokers* showed an increase in accuracy of 9 per cent, after a delay of 30 minutes, equal to the time taken in smoking a cigar.

In Test C, the *non-smokers* showed an increase in pitching a baseball accurately, without smoking, of 10 per cent.

The average gain in accuracy of pitching during Test C (when no smoking was done) for both *non-smokers* and *smokers*, is $9\frac{1}{2}$ per cent.

1. The foregoing experiments have proven conclusively that smoking does actually reduce a man's accuracy in pitching a baseball.

2. The smoking of a single cigar will affect a man's accuracy in pitching, and two cigars increase this effect.

3. In tests during which there was no smoking, the men improved in accuracy of pitching.

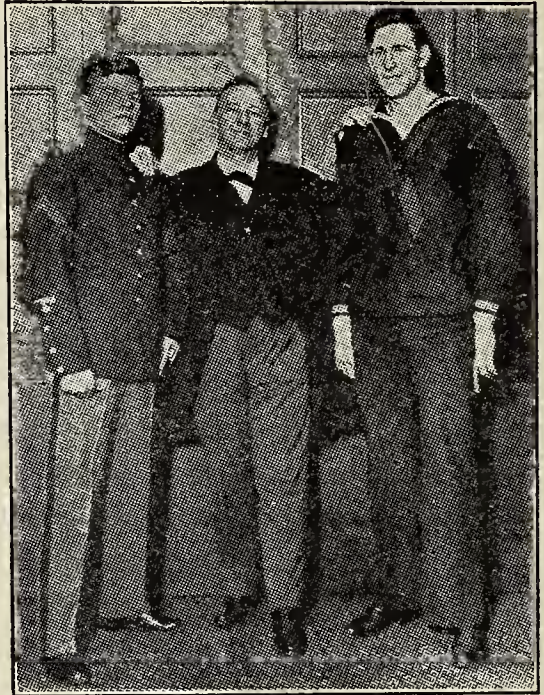
WHERE MILITARY MORALE AND MORALS ARE ONE

THE young sailor or soldier of to-day will form no small part of the nation's very lifeblood in the times of peace following. To consider now their moral, as well as their physical well-being, is not the narrow view; it is the broad view, the big, far-sighted view of things.

Those who prate that interest in this matter is "unmilitary" show a sad ignorance of what "military" means. There is nothing so important from a military standpoint as the morale of the men, and morale and morals in the long run are synonymous. Nature invariably punishes the offender against her laws by disease. A sailor or a soldier to be efficient must be healthy, to be healthy he must be clean-living. A man in the military service, stricken by any of the diseases that follow excess or unclean living, is as dead for military purposes as if he was stricken by the enemy's fire.

Napoleon has said that "an army travels on its belly;" it is equally true that it fights with its soul. No army of degenerates could win in the grueling test of endurance of modern warfare against an army of clean, fresh young manhood, with all their vigor of mind and body unimpaired. Such is my belief, and such, I know, is the belief of the Secretary of War. From every standpoint, military, political, moral, it is, above all things, our duty to protect these youths, so that we can say to the mothers of the country when the war is over, "We return your sons, made strong by suffering, made wise by discipline, no longer youths, but men, tried in the fierce flame of war, as worthy of their place in your family circle as they were when they left home."—SECRETARY OF THE NAVY DANIELS in *Association Men*, August, 1917.

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SECRETARY DANIELS

KEEPING AMERICAN SOLDIERS HEALTHY

THE disgraceful story of disease that is inseparably connected with the American army of the Spanish War days, it may confidently be said will never be repeated, partly, of course, because 20 years have brought more definite knowledge of how to prevent certain diseases that were then rife. Sanitation, pure drinking water, careful protection of food supplies, prompt destruction of wastes, personal hygiene; these, says Robert Forrest Wilson (*Munsey*, November, 1917) are a part of the standard established for the new army.

OFFICIAL ACTION

Dangerous personal habits are also marked for vigorous attention from military authorities.

"Nothing less than the absolute suppression of vice is regarded as a solution of the problem, and the goal of the medical corps is this very thing. .

"At the outset, Congress has armed the Secretary of War with two powerful weapons—the law that permits him to suppress commercial prostitution altogether in the vicinity of the camps, and the law forbidding the use of intoxicating liquors by the soldiers. It is army experience that a sober man seldom seeks impure associations. . . .

"By education, and by filling up the new soldier's spare time with healthy recreation, the medical corps hopes and expects to keep the American armies undefiled."

TRAINING CAMP ACTIVITIES COMMITTEE

THE Army Committee on Training Camp Activities working with the War Department is to try to save the American soldier "where the French, the British, the Australian and the Canadian were permitted to be sacrificed" because the authorities "neglected the whole problem . . . until too late." The chairman of the committee, Mr. Raymond Fosdick, is quoted by *The Survey* (Sept. 29, 1917) as saying:

"We are confident that we shall be able to arrange with the French government so that our commanding officers will be given civil authority in the towns or places where our camps are located. Preliminary steps have already been taken to protect our men while in France, and we are confident that we shall succeed in the undertaking.

"Our problem is one of the soldier's leave, primarily. Will he be permitted to take his leave, when not on active duty, in England? Or, if kept in France, will he be permitted to spend his time of leave in Paris or the other chief cities? Or will he be restricted to the smaller towns?"

General Pershing hopes, according to Mr. Lewis A. Crossett, of Boston, lately returned from the front, that it will be possible to grant leaves to the men for other places than Paris.

According to some English correspondents, London is by no means safe.

Mr. Fosdick continues: "We have three lines of defense in this fight. First, there is the positive work that this committee and the Y. M. C. A. and the recreation service of the Knights of Columbus are doing. That is, the athletics, the recreations of various kinds, and other activities to engage the interest of the men. Second, if that fails to suffice, there are the police powers. We are going to keep the prostitutes away from the camps and do all possible to discourage their trade. Finally, and only as a last measure, if the prostitutes do break through our policing, there are the prophylactic measures."

"More significant, perhaps, than even his confidence that the degenerating conditions in France can be overcome," says *The Survey*, "is Mr. Fosdick's view of what has been inaugurated in the United States this summer.

He is convinced that we have made a start toward making prostitution unprofitable in America. I do not say that we are far on that road, but we have started. These committees have secured the closing up of red-light districts in 30 cities; they have cleaned up similar conditions in 30 other cities that did not officially recognize their vice districts. We have seen this constantly shifting population of commercial prostitutes excluded from the localities of the army camps, and we know today that many of them, finding the life unprofitable, have gone to work.

"We are convinced that constant repression will ultimately reduce this trade to a minimum. In the old days there were always other cities to which these women would flock, when driven out of a city by a spasmodic wave of reform. Now a nation-wide organization, which will be effective during the war period, has at least seriously reduced the profits of this occupation."

UNITED ANTI-ALCOHOL PROGRAM

IN addition to the official work for safeguarding the soldiers from drink and vice, the special problem of helping them maintain sobriety by personal intelligence and purpose has been taken up by the United Committee on Temperance War Activities on Army and Navy. Practically all the national temperance organizations are represented in this committee which was organized to insure a comprehensive program without unnecessary duplication of work. Arrangements are being made to supply a convenient and attractive manual of facts concerning alcohol to each soldier of the new army; a valuable pamphlet on wine for similar distribution has been written by Vance Thompson, author of "Drink and Be Sober;" special slides prepared by the Scientific Temperance Federation will be shown in the camps by the stereomotorgraphs, the funds for which are being provided by other organizations. Arrangements are under way for including material in the moving picture films used in the camps. There will be posters, and lecturers of national reputation.

The actual work of putting the program into operation in the camps will be done through the Y. M. C. A., chaplains, and Knights of Columbus. Several of the leading temperance and religious papers have given advertising space freely to the work of the committee and its statement of funds required. The executive secretary is Harley H. Gill, 289 Fourth Avenue, New York City, N. Y.

* * *

"I want these boys of our army to have an invisible armor to take with them to France.

"I want them to have an armor made of such a set of social habits as will constitute a moral and intellectual armor for their protection overseas."

—Secretary of War Newton D. Baker.

FROM MANY LANDS

GREAT BRITAIN PLANS GREAT SERIES PROHIBITION CONFERENCES

A CENTRAL Joint Committee representing practically all the large British temperance organizations has arranged for a series of provincial conferences and demonstrations throughout the United Kingdom, beginning October 20 and ending in March or April with a great national conference in London. The object of the campaign is to bring to the people of Great Britain a more detailed knowledge of the effects of prohibition in actual operation, and principal speakers to be drawn from Canada, the United States and Russia. Among those promised are Prof. John A. Nichols and Dr. Daniel A. Poling of Boston; Dr. Charles Sheldon of Topeka, Kan.; Rev. B. H. Spence of Toronto; Dr. Matti Helenius-Seppala of Helsingfors. The conferences will take into consideration such war and post-war problems as taxation, labor and capital, housing, health, food, and morality in connection with the liquor question.

One constructive measure for sobriety is announced in an official order to take effect October 1, requiring all factories or workshops employing 25 or more persons to provide an adequate supply of wholesome drinking water to be used under approved hygienic conditions.

NEW ZEALAND

THE Colonel of the New Zealand expeditionary forces in Sling Camp asked the soldiers (May 3, 1917) not to buy bread or meat or any article containing flour, because women and children were in want of these foods and the soldier's ration was sufficient for him. On which *The Vanguard* (July 28) comments:

"Why should our men be called upon to make additional sacrifice while the brewers are allowed to waste good food materials sufficient to feed the entire nation one day in every eighteen?"

THE PRICE OF FINLAND'S PROHIBITION

WHEN the Finnish government last June proclaimed the final enactment of their prohibition law from which Czar Nicholas twice withheld his approval, the French and Spanish consuls at Helsingfors, according to the *Basel Nachrichten* (June 22, 1917), gave notice that shutting out the liquors of their countries from Finland would bring reprisals against Finnish imports in France and Spain.

Such is the pressure which the liquor interests of one country can bring to bear upon the internal affairs of another.

TUNIS

WHAT can be done in France is illustrated by a report (*L'Abstinence*, Sept. 8, 1917) that when the Bey of Tunis consented to send agricultural laborers to France, it was on condition that no alcoholic liquors should be offered them. Consequently the Under-Secretary of State to the French Central administration "has just prohibited absolutely the use of wine, cider and beer for Tunis' farm workers" in the saloons.

PERU

THE Peruvian government is attacking the alcohol question which is said to have become serious, especially in the mining districts. Laws are proposed forbidding the making or importation of drinks containing more than 1½ per cent of alcohol, with a view to eliminating even these eventually and encouraging the production of non-alcoholic beverages.

The oncoming generation is to be provided for by temperance instruction, a prize of \$500 in gold to be awarded to the author producing a text book accepted by a committee composed of the Director of Public Instruction, the Director of the Public School for Men, a teacher chosen by the public school teachers of Lima, and a member of the National Temperance Society of Peru.

SWEDEN

A NEW law passed this year tightens somewhat the restrictions on the sale of liquor, but omits any provision for the local veto which the temperance party has long been demanding. The law relates to drinks containing more than 3.6 per cent (volume) of alcohol. Its chief characteristic seems to be concentration of the business in the hands of the "company system." All sales are placed under the company system, even those of wine and ale, thus ending the sale by private individuals. "On-sales" may be transferred to private vendors provided the liquor is bought from the company. The importation of spirits, wine and beer can only be done through the company. No more than four litres of spirits a month may be sold to a single customer and none to minors, those who have been fined or treated for drunkenness or imprisoned for crime due to drink. County governments may no longer issue occasional licenses. The law goes into effect January 1, 1919.

On August 30 the Swedish Prime Minister announced, *The International Record* reports (Oct., 1917), that the distilling of branntvin would be entirely stopped because of a shortage in the grain crop.

NEW NORWEGIAN LIQUOR LEGISLATION

THE Norwegian Parliament has had occasion several times this last year to consider the alcohol question, and out of its debates have come a number of legislative enactments, some of a temporary and some of a permanent character.

TEMPORARY PROHIBITION ORDERS AUTHORIZED

Among those belonging to the first class summarized by the editor of *Internationale Monatsschrift* (July-Aug., 1917) is a law which gives the government authority to order a temporary prohibition or restriction on special occasions, such as in case of war, the outbreak of extensive strikes, the gathering of large crowds of people, great conflagrations, time of scarcity, etc.

The law provides for a tolerably large class of cases, so that most of the "special circumstances" would permit either total or partial prohibition. The

boundary line of the district in which the prohibition may be ordered is also very elastic, as the government may stop the sale or the license in a whole or a part of the country.

The law comes into force at once in that the present temporary prohibition of spirits remains in force, and besides the sale of wine of more than 15 per cent alcohol may also be prohibited. The city of Stavanger with 40,000 inhabitants was practically dry for some weeks during a great strike when only the sale of weak beer, $2\frac{1}{2}$ per cent alcohol at the highest, was allowed.

STRICTER CONTROL OVER HOTELS AND CAFES

Previous to the passage of this law, one was enacted which gave strict control over the hotels and cafés. The police were given authority to investigate all conditions connected with every retail place and to withhold the permit of any proprietor unable to furnish satisfactory guarantee. The government, furthermore, grants to communities that wish it, the right to make every personal retail license dependent upon its acceptance by the local authorities. Many communities have availed themselves of this right.

In another law the Parliament, which on the whole is very friendly to the temperance group, was liberal in its provisions for the sale of weak beer, believing that the hotel law gave sufficient authority to prevent the misuse of these drinks. This act, however, has given the abstainers considerable trouble.

LIFE LICENSES TO GO

One measure passed by the Parliament which will have a very important effect in the future is the abolition of the life licenses that had been granted in considerable number as one of the privileges of an English liquor company. All life licenses and those for an indefinite time are now to end in one year and no right to sell will be granted without the approval of the local authorities.

Those who are acquainted with the situation in Norway know the extent to which these life licenses impeded the anti-alcohol movement. In the final crippling of this company the Norwegian abstainers have won a decisive victory.

LIMITED COMPENSATION ARRANGEMENTS

The new law specifies that the sale or retailing of spirits can only be carried on by those who have received a special license. The old holders of a lifetime license are given a year in which to adjust themselves to the new law. If, in the course of this year, they apply for and receive a new license they can make no claim for compensation. If they do not apply for a license they also lose their right to claim compensation. But if they ask for a license and are refused, they can put in a claim which will be referred to a special commission. Disputed cases will be decided by the Supreme Court.

LOCAL OPTION ACCOMPLISHED

With this law local option on the alcohol question becomes an accomplished fact. Nothing now prevents a local authority from prohibiting even wine and beer, and since the decision in regard to the sale of spirits is now in the hands of the community, men and women, it is actually the people who either directly or indirectly will decide as to the liquor traffic.

BURDEN OF MAJORITY TO BE PUT ON LIQUOR PEOPLE

The government is considering now another bill to be laid before the present session of Parliament, which will extend local option still further by making it operative either in individual communities or in whole districts.

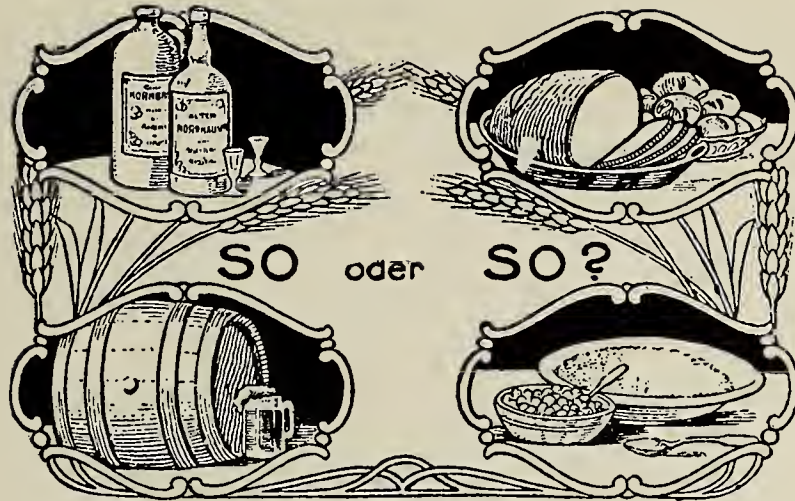
When the inhabitants of a community or of a district vote for total prohibition, then the importation of liquor into such a district will be stopped, making it truly dry. The bill contains also a new rule for popular voting on the spirit traffic. Heretofore, prohibition was established only when the abstainers cast a majority vote against the traffic. Three-fourths of all the spirit selling companies have been closed out under this ruling. Now it is proposed to make the liquor people prove that the sale of spirits is desired by furnishing a majority in its favor. The plan is not yet completely worked out, but that it will be in the near future is probable. It is also possible that a special law will be enacted establishing prohibition for the whole country, such as has now been provisional since December, 1916, and continuing it until the end of the war. It is very probable that on becoming accustomed to these new provisions the people will conclude to forbid the return of the traffic.

HUNGARY FORBIDS FRUITS FOR SPIRITS PRODUCTION

A TELEGRAM from Budapest to Vienna (*Neue Freie Presse*, Aug. 23, 1917) states that a government order forbids the employment of cherries, pears and apples for the production of alcohol. Plums may not be used except from orchards of spirits manufacturers who raise them specially for this purpose. The use of barley in beer was forbidden in March.

GERMAN PLANS FOR ABSTINENCE TRAINING OF YOUTH

THE first annual meeting of a German Catholic society for training the young away from alcohol has just been held in Essen. The present war, now past its third year, the report announces (*Deutsche Warte*, Berlin, Sept. 8), with its heavy toll of young lives has placed in a clear light the importance and the necessity of a strong and healthy future generation for the fatherland. But everything done to secure it is insufficient if they are not thoroughly trained and educated to habits of life without alcohol. The Archbishop of Cologne, Cardinal von Hartman, gave his sanction to the object of the society.



A GERMAN FOOD CONSERVATION SUGGESTION

*From a handbook Was jedermann vom Alkohol wissen muss (What Everyone Should Know About Alcohol) by Hans Stormer, published in Berlin, January, 1917.
A popular presentation of the facts about alcohol*

GERMAN WOMEN SPEAK THEIR MIND

A "WOMEN'S conference for the study of the alcohol question" was held in Dresden this summer by representatives of the women's movement from all over Germany. The report published in the *Deutsche Zeitung* of Berlin (Aug. 5, 1917) and several other German papers, states that a resolution was adopted containing the following demands:

1. Immediate prohibition of brewing and distilling in order to preserve the total products of gardens, fields and woods, and sugar, for the greatest possible direct nourishment of the whole people.
2. Prohibition of alcohol during demobilization of the army and navy.
3. After the conclusion of peace, an earlier closing hour for liquor selling and no exceptions left to the discretion of local police authorities.
4. New legislation for the whole alcohol trade, with the exclusion of places employing barmaids to stimulate trade, and prohibition of the use of alcohol by all those under 19 years old.
5. Local option on the granting of licenses.
6. Obligatory anti-alcohol instruction in all schools and teachers' training schools.
7. The establishment of non-alcoholic restaurants and public houses by financial aid from the community.
8. The participants in the women's conference are confident that all these reforms will be hastened in proportion as women take part in state and community suffrage.

JUVENILE CRIME IN GERMAN POLAND

AT a meeting of German school teachers in Posen, early this year, a judge in the juvenile court, according to the *Posener Tageblatt* (Feb. 17, 1917), gave an address on juvenile crime in which he said that it had increased in

the large cities fully 50 per cent during the first two years of the war. The most dangerous provocative of crime, especially of brutal crimes among the young, is alcohol. The remedy is not punishment but better training. Many of the punishments which are deterrent with adults have little influence with the young.

* * *

CROSS CURRENTS IN FRANCE

THE FRENCH WINE RATION

THE *London Lancet* (Sept. 1, 1917) prints a letter by Prof. Landouzy of France, to a colleague who asked his advice, during the first year of the war, as to what attitude medical men should take regarding the wine ration.

The Academy of Medicine, explains *The Lancet*, was then about to issue a resolution to the effect that the fighting man should receive daily a ration of wine, but high authorities and public opinion alike were disturbed by fears of alcoholism which were set forth in a number of speeches and letters, and in diligently compiled statistics.

Prof. Landouzy was not an abstainer and he deprecated the confusion between "the alcoholism of the northern countries of Europe" and the metabolic effect of what he styled a proper amount of French wine supplied, pure and unadulterated, disregarding the fact that the same ethyl alcohol and the same quantity of it are found in half a pint of wine and a two-ounce glass of whisky.

He advised that "natural wine ought to be given a place in the alimentary hygienic and economic ration." He would have the wine measured out in doses in the same way that albumen, carbohydrates, sugar and fats are measured. He thought every Frenchman could with advantage drink daily a liter of natural wine which at the price of 30 or 40 centimes would supply him with 500 calories daily at a price only one-seventh as much as that of the same number of calories from the butcher.

AN ILLOGICAL COMPARISON

In making this comparison, Prof. Landouzy showed a distinct bias, for he took costliest form of calories—that of protein food in the form of meat, whereas the carbohydrates, cereals particularly, furnish the energy for work most economically. To be fair, he should have made the comparison in cost with that of potatoes, rice or other cereals—and he should not have included the calory value of the alcohol in the wine, because in getting energy from alcohol the body is subjected to its injurious action. In a quart of wine, which usually contains over rather than under 10 per cent of alcohol, the drinker would get about three ounces of alcohol, about three times the amount that produces demonstrably harmful effects. The rum ration tried in the American Civil War furnished only about one-third as much alcohol as a quart of wine contains, and that was clearly proved to be injurious.

A CAUTION BY THE FRENCH ACADEMY

It is worth noting that though the French Academy of Medicine passed the resolution in favor of a regular wine ration to the soldiers, it added the precaution that "where the authorities provide wine for the soldier he should not be able to obtain it elsewhere," recognizing thereby the danger of alcoholism that had been pointed out to them and that the wine was quite a different substance from the other materials in the ration. Imagine the same stipulation applied to bread, meat and vegetables.

The dangerous connection between wine and alcoholism is not a matter of distorted fancy, even if some of France's scientists have not yet recognized it.

A CONSERVATION DEMAND

A LEAFLET by Charles Gide issued by the National Economy League of France, demands that alcohol instead of being turned into liquor without restriction, shall be diverted to useful ends where it is much needed.

"Alcohol is used as a solvent in making explosives. Every cartridge requires several litres, every great battle thousands of hectolitres. In a year, the war takes a quantity equal to the total production of France in normal times.

"The result is that France has to import from America at a high price the alcohol necessary for the war factories.

"Thus the millions of little glasses consumed every day are robbing our munitions. And not only munitions, but our food supplies," declares M. Gide.

"Of what is the so-called industrial alcohol made? Solely from food-stuffs: barley, rye, corn, rice, beet-root especially [so much less for sugar which we are told is practically exhausted in France]. The two million hectolitres of alcohol produced in France demand the distillation of more than six million quintals of food materials which would nourish the entire French people for about a month.

"Hence it is not enough to say to the drinker, as we have been doing, that he is poisoning his posterity. We must add that every 'little glass' takes from France a little powder and a little bread.

"Is it fair that the consumption of sugar, or of gasoline, or of bread, or of coal should be limited while that of alcohol is unlimited?

"Let alcohol fly to the front in the shells. We don't want to see it in civil life."

RESTRICTIONS AND THE DIFFICULTIES OF ENFORCEMENT

BY the terms of a prefectoral order of July 28, 1917, says *Humanite*, Paris (Aug. 12, 1917), the retail sale of spirits for consumption on the premises is forbidden to all cafés, smoking rooms, and other drink-selling places of any nature except at hours corresponding to the two principal meals of the day fixed at from 12 o'clock noon to 2 p. m. and from 7:30 to 9:30 p. m. The order forbids also the sale of spirits for on-consumption to women and

to minors under 18 during the entire period when the drink shops are open. We do not understand that this order interferes with the sale of drinks with food.

The orders are not confined to Paris, says *Humanite*, but are executory throughout France and excite great public interest. "Perfect observance will bear witness again to the excellent spirit of the people of Paris."

Meanwhile a statement in *Le Journal des Debats* (August 23) complains that the authorities often interfere and compel the liquor sellers to break the law, and cites a case in which the bartender had refused to sell out of hours to the companions of a woman said to be sick and "needing" the spirits. The dealer persisted in his refusal; the trio left his establishment but presently returned with a police officer, who ordered him to make the sale "and if you have any trouble about it, you can say it was on my responsibility."

The correspondent comments somewhat sarcastically: "The incident shows with what solicitude the police watch over our health. But one would only inquire whether a policeman in prescribing such remedies is not encroaching a little on the domain of medicine, and why if he considered it necessary to administer spirits, he had his prescription filled at the bar of a saloon since spirits can be obtained of all the pharmacists."

FRENCH OFFICIALS AGAINST ALCOHOLISM

EVIDENCE from the French press and other publications which have passed the censor shows that notwithstanding the claims often made of sobriety in wine-drinking France, alcoholism is a constant cause of anxiety to those charged with the conduct of the war.

A SENATOR'S TESTIMONY

In the course of a discussion of a law regarding the liquor traffic in the French Senate, February 21, one of the members, M. Hervey, said, from personal observation:

"Alcohol ruins discipline in the army; at the rear it is responsible for an enormous diminution of work."

A NAVAL OFFICIAL FINDS IT NECESSARY TO ISSUE WARNINGS

Vice-Admiral Rouyer issued in March, 1917, (*Le Figaro*, March 6) the following order to be applied to all communes of the camp entrenched around Toulon.

"Considering the pressure of near military events on which the welfare of the country will depend, it is necessary to develop to maximum intensity the output of labor in the war factories.

"In view of the fact that alcohol is a terrible enemy not only to the soldiers and the workers of both sexes, but also in a general way for the women and youth who represent the future of the race.

"It is ordered:

"That the retail sale and on-consumption of spirits, alcoholic liquors and aperitives other than those derived from wine of less than 23 per cent are forbidden—

"1. To soldiers and marines of all grades;

"2. To men belonging to the mobilized classes concerned with work or service in the national defense, in private factories as in marine or war establishments;

"3. To women;

"4. To minors under 21 years of age."

THE MINISTER OF WAR URGES MORE EFFORT AGAINST ALCOHOLISM

The French Minister of War issued on March 17, 1917, orders re-emphasizing all previous orders designed to restrict the sale of liquor to soldiers. He urged that measures be taken to stop illegal selling, and also by educational measures to encourage sobriety in the soldiers.

The order, published in full by *La Bataille Syndicaliste* (April 1, 1917), was to the general military governors of Paris and Lyons, and the general commandant of the land and sea forces of northern Africa. It said:

"It does not seem to me that in general the military authority is sufficiently alert to secure strict observance of the orders previously issued with a view to combating alcoholism, and that it is especially important to the highest degree not to allow it to go on unpunished.

"A regulation is valuable only as it is applied. It is not enough to issue orders; their daily enforcement by responsible authorities must be assured.

"I believe I ought to remind you of the essential interest that I attach to the matter of alcoholism in the army and beg you to take pains to use all the various means you have at your disposal for securing useful results.

"It is necessary to distinguish between the measures which can be taken with respect to the liquor sellers and those pertaining to the soldiers.

ORDERS REGARDING LIQUOR DEALERS

"As respects the dealers you can and you ought—

"1. To prove infractions of the prohibition of the retail sale of alcohol to soldiers and to prosecute in the police courts violations of the order in which you have given notice of this prohibition in executing my circular of October 27, 1915;

"2. If it appears necessary, have their selling places closed to the troops;

"3. Also in case of necessity have these establishments closed permanently or temporarily in conformity with the right conferred on military authority by the decrees of the Council of State, August 6, 1915, that I called to your attention in my circular of the following August 30.

EDUCATIONAL WORK NECESSARY AMONG SOLDIERS

"As to the soldiers. You should take both preventive and repressive measures.

"Besides the incessant paternal care that officers ought to exercise over those of their men whom they observe have a serious leaning toward alcohol, the preventive measures most highly recommended are:

"1. Frequent anti-alcohol lectures with stereopticon slides suitable for gripping the simplest intelligence; detailed instructions have been sent you in my circular of March 14;

"2. A poster recalling the recommendations of the lectures;

"3. Very strict limitation of the hours during which the soldiers have access to saloons.

ORDERS OF PUNISHMENT FOR ALCOHOLISM

"The repressive measures are:

"1. Severe individual punishments and for serious repetitions remand to the disciplinary sections;

"2. Limitations of hours for going into the city.

"To summarize: It is important that by example, repressive measures, severe restrictions, the work against alcoholism be conducted actively, with unceasing and renewed vigor by all authorities subject to your orders.

"I request you to send me under the enclosed stamp within two months from the date of the present circular a resumé of the principal measures you have taken for carrying it into effect.

"For the Minister of War,

"By the Under Secretary of State, René Besnard."

PARLIAMENT TAKES A HAND AT REPRESSING DRUNKENNESS

Finally, Parliament has at last taken action in an attempt to suppress drunkenness—which must, therefore, exist—by a long-discussed measure passed some time ago by the Senate and by the Chamber of Deputies in September. To Americans it will seem far from radical, as it is merely aimed at prohibiting drunkenness in public places.

The Chamber of Deputies has passed a bill (September, 1917) forbidding drunkenness in public places. The bill provides that anyone found intoxicated on the streets, in saloons, or public places shall be fined from one to five francs (\$.20 to \$1.00) for the first offense, and imprisonment for three days as the maximum penalty for the second offense. The penalty for the third offense within a year from the second is a fine of from 16 to 300 francs, in addition to imprisonment from six days to a month. Those incurring four convictions within three years may be deprived of civil rights and of parental rights over their children.

WHAT FRENCH TEMPERANCE FORCES WANT

The National League against Alcoholism, at its annual meeting at Lyons in June, unanimously placed itself on record in favor of total prohibition of alcoholic beverages. In case this program should not be imme-

diately adopted by Parliament, they favored the following reforms (*L'Etoile-Bleue*, July-Aug., 1917):

1. Prohibition during the war of the consumption of alcoholic beverages of more than 18 per cent alcohol; all alcohol to be reserved for explosives and medical purposes.

2. Complete suppression of the privilege of home distillation without compensation to the producers.

3. Reduction of the number of selling places.

4. Prohibition of the manufacture and sale of spirits containing more than 600 milligrams of essence, with the exception of anisettes, curacao, menthe and kummel.

5. Prohibition of the sale and transportation of distilled liquor in less than five quart amounts.

6. Encouragement of the consumption of fresh fruits and in non-fermented forms. Use in distillation only of fruits and fermented liquids not fit for consumption.

7. Prohibition of the exploitation of liquor business like other trades.

8. Industrial use of alcohol to be favored by all fiscal means.

9. When reconstruction of the communes destroyed by the Germans takes place the competent powers should prohibit, without reserves of acquired rights, the opening of any liquor selling place.

* * *

A GERMAN LOOK INTO THE FUTURE

THIS war has set at rest many doubts and anxieties. We Germans are at root still a strong and healthy race. But that, we must remain. It would be fatal for us to be blind to the dangers which threaten the roots.

The present and the future after the war will make enormous demands upon the health and strength of our people. How many of our best and soundest we have lost whose places must be filled! Everything injurious must therefore be combated with all our energy.

Alcohol hinders our industry and makes work more dangerous by increasing accidents. It is estimated that 1,200 fatal accidents due to alcohol occur in Germany every year. And these are only the fatal ones.

The high mortality in the alcohol trades is also well known.

The lesson we should draw from all these facts is one easy to comprehend.

WHAT IS IN THE MAGAZINES

COUNTS UP THE COST

WHAT Booze Did to Me in the Twenties (*American Magazine*, October) is another of the personal accounts of the physiological effects of alcohol on a normal human being which have been appearing in the popular magazines. Like Jack London, the author was no weakling, physically or mentally, as is proven by his "come back" to a career of a popular writer earning \$10,000 a year.

* * *

ONLY A SHAM SENSE OF FORCE

IN the course of an article on "What to Eat" (*World's Work*, August) Graham Lusk makes this comparison between sugar and alcohol as food materials:

"Sugar is a valuable energy carrier. When two or three lumps of sugar are given every half hour during severe work they combat fatigue. Although alcohol gives a sham sense of force, sugar actually contributes to the capacity for greater accomplishment."

* * *

NEARLY THREE TO A MILE

THE Rev. R. B. S. Hammond, of Sidney, New South Wales, now on a flying trip through the United States, made an address in Auckland, Australia, just before sailing, in which he quoted, according to *The Vanguard*, from a letter he had recently received from a friend in England.

The friend wrote that he was "in charge of a motor patrol wagon working in London, having a radius of six miles, and in four months of this year his motors had done 6,328 miles, and had picked up 17,000 intoxicated soldiers."

* * *

LIQUORS ARE FORBIDDEN IN GOUT

IN the treatment of gout, the theory that intolerance of the body to purin is marked, is still adhered to, and foods rich in these bodies are strictly interdicted, says the *Medical Record* (Oct. 6, 1917). Alcohol in general is prohibited because it is believed to have an adverse influence upon the oxidizing power of the ferments acting upon the purin bodies. In the case of beer, the interdiction is based upon the fact that the brewer's yeast which enters into the manufacture of this product is very rich in nucleo-proteins.

ALL IN ONE PUBLIC HEALTH CLASS

THE medical facts as to the effects of alcohol on public health leave no doubt as to the propriety of public health officials attacking a habit which is now known to be either a direct or a contributory cause in the shortening of life and the production of disease. . . . We approach this subject in the same manner as we attempt to prevent the illegal sale of poisons or the spread of harmful bacteria. Medical knowledge now shows that the use of alcohol is detrimental to human life and health, and it therefore becomes a public health question.—Charles F. Dalton, M. D., Secretary Vermont State Board of Health, *Bulletin*, March 1, 1917.

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A BRITISH REASON WHY BRITAIN IS SHORT OF GRAIN

A RECENT article in the *Fortnightly Review* quotes figures given in the House of Commons in November, 1916, according to which grain and sugar used in liquors in Great Britain in the year ending September 30, 1916, amounted to 1,758,068 tons, or nearly the average weight of the British wheat harvest of about 2,000,000 tons. It is extraordinary, comments the writer, that whereas the government has put the people on their honor to reduce their consumption of bread and sugar, the drinking section of the community has not similarly been told to limit the consumption of drink which is manufactured from grain and sugar.

Says the New York Health Department *Bulletin* (August 18, 1917): "Conditions are entirely similar in this country. How much longer will the intelligent people of the community submit to dictation at the hands of those who poison the public health for personal gain?"

* * *

THE PATENT MEDICINE MUST GO

THE New York Health Department in a battle which it describes as "vested property rights against public health," declares without qualification that "patent medicine must go."

The board put into the sanitary code a section requiring patent medicine manufacturers to print on their labels the names of the physiologically active ingredients or to file the formula of the preparation with the Board of Health. The manufacturers served a temporary injunction in the board restraining it from enforcing this section of the code. The Appellate division of the Supreme Court on July 13 decided that the ordinance was invalid. The Health Department appealed, but meanwhile announced that it had already successfully prosecuted several patent medicine fakers under other sections of the sanitary code concerning the validity of which there could be no question, and that there would be no let-up in the campaign against patent medicines even though it has to be conducted in a cumbersome and round-about way.

It is the old story, as in the liquor issue, private property against public health, and the enormous power of defense wielded by all these interests when attacked.

ONE GROUND FOR HOPE OF RUSSIA

WILL the great hope in Russia be disappointed? was a question Lincoln Steffens asked himself as he went to Russia at the time of the visit of the Root Commission. (*Everybody's Magazine*, August, 1917.)

"History has other examples which indicate that a people will turn upon and rend itself in vice when a great, universal hope is disappointed. Would that happen again? I wondered and, wondering, returned to the upper deck to Charles R. Crane. He knew the Russians; this was his twenty-second trip to Russia. He should be able to say whether all this faith, hope, and pride were sailing for a fall. The Tsar was gone, but had the Russians themselves the character to realize their dreams, the dreams of all the peoples? The little dancer who was giving him a Russian lesson closed the grammar over her finger to hear Mr. Crane's reply.

" 'The Russians,' he said, 'are a strong, gentle people with a genius for cooperation and centuries of experience in local self-government and community ownership. They know what 'land' means; 90 per cent of them already have some of it. And—' A burst of drunken song from the first-class interrupted, or inspired, the rest. 'And,' he concluded, 'this Russian revolution is a revolution without vodka, without drink.'

"The dancer reopened the book; the answer was complete for her."

* * *

WINE AS "A PROMOTER OF GOOD FELLOWSHIP"

WHEN abstainers and drinkers mingle on the same social occasion, the abstainers often have an entertainment which the others miss, the watching of the effects of alcohol. How alcohol may and often does make a loathsome spectacle out of a person who expects it to help him be only a "jolly good fellows," is depicted by James Hay, Jr., in "The Side Shows of Drink" (*McClure's Magazine*, October).

Before the eyes of the writer one evening the great Tragedian (the writer's name for alcoholic liquors) accomplished a transformation. A poet was the lion of the evening. As the cocktails got under way he held the center of the stage, dominated the intellect and the emotions of a score of men. Then, as the drinking went on, the poet introduced "an off color joke" from which he went deeper and deeper into mire until in a short time his obscenity and profanity became shocking and revolting.

The writer applies the name of "The Great Tragedian" to alcoholic liquors because it "has broken the hearts of mothers and wives whom we have known; has shown us the pale, twisted faces of the children he has starved; and has brought us to the untimely death beds of men whom we once knew as brilliant and lovable."

"Today the great Tragedian is lamenting his loss of business, a sure warrant for greater happiness and contentment than the world has ever known."

MAKING THE WATER SUPPLY SAFE

THE use of wine and other alcoholic liquors has often been excused on the ground that good and safe water cannot be obtained, especially abroad. General Galliéni of the French army some years ago related his experiences in French China, Madagascar and other stations where the purity of the water might reasonably be questioned, and declared as a result of his observations, "Better bad water than any kind of alcoholic drink."

Without advocating the use of bad water, the contrast is sufficiently striking to attract attention. Fortunately since these words were spoken some 20 years ago, the matter of making water safe has been solved by chlorinating it. The *Bulletin* of the Chicago Health Department (June 23, 1917) tells how this may be done so that motorists or travelers not sure of their water supply may make it safe and wholesome.

Calcium hypochlorite tablets containing from 20 to 30 milligrams of available chlorine per tablet are put up in glass vials and if the vials are kept stoppered in a cool, dark place the tablets will retain their potency about four weeks. In Chicago the tablets may be had from the Health Department.

To use: Dissolve one tablet by crushing between the fingers in one quart of water in an ordinary fruit jar, which should be sealed with an air-tight cap. The jar is then shaken, contents allowed to settle, and should be stored in a cool, dark place. This is the stock solution and under average conditions will last about one week, after which it should be renewed.

To prepare water for drinking, take one teaspoonful of the clear stock solution, avoiding the sediment, to one eight-ounce glass of drinking water; allow it to stand for five minutes, when it is ready for drinking, and will be safe. If it is suspected that the water is heavily polluted, two teaspoonfuls of the stock solution should be used to each eight-ounce glass of water. If it is desired to make up a daily supply, ready for use, it can be done by adding four teaspoons of the stock solution to each quart of water.

Reports from the war area in France tell of the pains taken to protect the soldiers against impure water. Water carts of chlorinated water have been driven up to the support lines so that the men might be assured of a supply of assured purity.

* * *

VITAL LIFE LOSSES DUE TO ALCOHOL

THE temperamental change induced by intoxicants in small quantities is highly characteristic, says Dr. H. H. Drysdale (*Ohio State Medical Journal*, August, 1917). It may be described as an intellectual shortsightedness—a condition in which all that is at hand, the present company and the interests of the hour, will be found dominant and all that is remote from these excluded. One who can relinquish care as a voluntary act can take it up again earnestly and promptly. The banishment of obligation by alco-

hol does not permit the same decisive resumption of responsibility. Thus one's intellectual efficiency is disabled.

Even in small doses alcohol exerts a traumatic effect upon the higher brain faculties. Because action follows thought with greater promptness, but with less deliberation, a man's judgment and conclusion are warped. His conduct and labor become more automatic and mechanical and less original. Many grow indifferent and neglectful of ordinary every-day duties. The former conservative and painstaking individual becomes a speculator, is visionary and imprudent. . . .

There are instances where unexpected changes in personality, religion, conduct and all other conditions which have marked the previous career occur and are traceable to the cumulative, degenerative action of alcohol which has been used in moderation for years.

One of the worst indictments against alcohol is the fact that those who use it to the point of intoxication very often indulge in conduct which exposes them to grave perils. It is no longer doubted that many men and women would have escaped venereal diseases and other tragedies if they had not, while intoxicated, placed themselves in jeopardy. . . .

Business and professional life is also fraught with many risks. Ambitious men who are straining every nerve to attain success, avaricious men struggling to accumulate wealth, and men who are carrying burdens under intense strain and stress, are subject to periods of depression and exhaustion which is a favorite soil for the growth of alcoholism and other health-wrecking habits. . . .

Scientific medicine has clearly pointed out that the constant "nipping" of intoxicants is antagonistic to health and happiness and that therapeutically its activities are limited. It would therefore seem to be the part of wisdom to encourage the enactment of laws which will at least place alcohol beyond the reach of those who have not the force of character to abstain.

The service of lifting mankind to higher planes of living and of reducing to a minimum the sordid misery and needless infirmities and handicaps resulting from intemperate living is a phase of preventive medicine which concerns the neurologist and psychiatrist. The problem is a momentous one, but the task will be made easier when national prohibition becomes our ally.

* * *

ANOTHER BEER CLAIM LAID

AN editorial in the *Journal of the American Medical Association* (Oct. 13, 1917) disposes definitely of the brewers' claim of food value for beer on the ground that it contains protein, one of the essential food factors of the grain from which it is brewed. The fate of this protein during the process of brewing is traced, according to a very recent article on the subject in the *Biochemical Journal* by Prof. Sharpe, of the department of physiology in the Glasgow University.

A part of the protein, the article explains, is acted upon by the enzymes concerned in the sprouting of the grain during the malting. This passes into the solution during the mashing, but some of it is thrown down afterward as a sediment during the processes of boiling, hopping and subsequent cooling of the wort. A further portion of this protein is removed during fermentation by the yeast which uses it as food. Still more of it is purposely removed by the brewer after the beer is made to prevent the "cloudiness" it would cause if it remained.

According to Prof. Sharpe's new analysis, the protein content of beer varies from 0.038 to 0.185 per cent, whereas in the grain the protein amounted to from 11 to 12 per cent. All that did not remain in the grain and find its use in cattle food is therefore destroyed. "One might as well exploit the protein in ginger-ale or fruit juices," says the *Journal*, and concludes that any claim for the protein contribution which beer makes to the diet "no longer needs serious consideration."

The editorial includes also a consideration of the other constituents, of beer, the small amount of sugars and other soluble carbohydrates and the alcohol. "Beer ordinarily contains from 3.5 to 4 per cent of alcohol. The idea long held by a large portion of the public that 'alcohol increases the power of endurance, and gives greater energy and ability to work longer' has given way to a more accurate appreciation of the real rôle of this substance in the body. Despite the fact that alcohol can be burned in the human organism, the most enthusiastic supporters of its use, if there still be such, do not defend it on the basis of superior nutrient virtues. The pharmacologists almost without exception rank alcohol as a depressant rather than a stimulant in the true sense; and the therapist who cares to advise the employment of alcohol does so from the standpoint of its drug action rather than because of any superior food value in the product."

One medical writer is quoted who still "cares to advise" its employment in quantities of *not over* "one pint a day," in certain afflictions, excluding "neurotic conditions, diabetes, gout, rheumatism, obesity and genito-urinary diseases."

But the editorial follows this quotation with the statement:

"We leave it to our readers to steer a safe course, if there is any, between the indications and the contra-indications for beer." The doubt is well founded since the failure to find any such safe course, in spite of the most earnest exhortations and tragic consequences is written through all the pages of history, up to and including our present era of almost supernatural scientific knowledge and achievement."

BOOKS AND PAMPHLETS

STAND UP, YE DEAD

By NORMAN MACLEAN. *New York: Hodder and Stoughton. \$1.25.*

THREE evils concerning which the author believes Great Britain has made "the Great Refusal" he maintains gravely menace national victory and permanence—the declining birthrate, social immorality, and drunkenness.

"When, last winter, the enemy poured into a trench, and almost all the defenders were killed, a French sergeant, grievously wounded, grasped a rifle and began to shoot, crying out to his semi-conscious comrades, 'Stand up, ye dead.' At the wild cry the wounded arose, and the half-dead began to shoot with unsteady hands. By a resurrection from the dead the trench was saved. To a race that has set its face towards decay, there ringeth from heaven the cry, 'Stand up, ye dead.' It is not yet too late to save the race, the empire and the world."

It is a depressing picture that the author, a British writer, draws of a country in which war, pre-natal death and evaded parenthood are "pruning life at both ends." The factory system has drawn the people to the cities from the land which today furnishes only 1,800,000 wheat-growing acres as against 9,000,000 of a century ago (page 59). The slum and "the lord of the slum," drink, are indicted for physical and moral conditions "pressed upon the people" by the state at every corner. "It is no use decrying publicans and brewers for these are only what we ourselves have made them."

As with other British writers, there is a scathing criticism of the forcing of the liquor canteen upon the new national army. The old volunteer army before the war was recruited largely from congested city areas where the great majority of the men had become addicted to alcohol. The canteen was provided (as in the old days of the American army) in the idea that it was better to supply the liquor under military supervision.

"The strange thing, however, is that the canteen system which was necessary for the small voluntary army should have also been imposed by the army authorities upon the full manhood of the nation when they sprang to arms in defense of King and country. Though no trainer would ever allow the use of alcohol by those preparing for any athletic sport, though the man who would excel at football or racing or boxing or shooting, as a first step eschewed all alcohol, the government of this country provided alcohol as an integral part of every camp where the heroic of the race set themselves to endure hardness. . . . For the youth of the nation, wearied with the hardness of unwonted exercise, away from the influence of mothers and loved ones, warned by the Secretary of State for War against alcohol the government provided the narcotic of alcohol. Millions came within the sphere of its baneful influence who never would have been so exposed in days of peace. And not only so, but though it has been scientifically established that alcohol lowers the vitality, a paternal government, in the mud and misery of the trenches in Flanders, provided for each soldier the sustenance of rum, though from such a stimulus no benefit could accrue. . . .

"While the taxpayer is behind and supporting the canteen, the counteracting forces are left to the support of the charitable. The Y. M. C. A. or Church huts are there not by right but by favor, and whatever attractions they provide are provided by means of voluntary contributions. The state provides the means of degeneration; it is left to the voluntary effort of private citizens to provide the means of healthful recreation. It is truly a strange world. . . .

"Hitherto the youths of this country were protected by the slow evolution of beneficial restrictions. In Scotland the public-houses were shut on Sundays. The young men were protected on at least one day in seven. But when at the age of 18 they put on the King's

uniform that protection ceases. The public-house is shut, but the canteen is open on Sunday. Not even on one day in seven is there protection from temptation for the youths of this country now conscripted. The fathers and mothers who give their sons to their country do not realize the provision a grateful country is making for darkening their souls by the fumes of alcohol. . . . Out of the social conditions now upheld by a beneficent government there cannot emerge any ethical revival. The ranks of those who have learned the narcotising benefit to alcohol and who will naturally turn to the same comfort, will be greatly multiplied."

The volume closes with a stern warning and appeal to the nation to "return to God, which means not only a transfigured soul in a transfigured work but also a transfigured life. National repentance with us will realize itself in peopling the waste places, in emptying the slums into the country, in destroying the vested interests in the vice of the people, in making a healthy and beautiful life the birthright of every citizen. . . .

"To every nation there comes, after long decline, the stage when recovery is impossible.

"It is not very far away from us, that last irrevocable. . . . A nation that spends over half a million pounds sterling a day on alcohol when the greatest crisis in the world's history requires all its strength and all its resources; that turns grain into a waste when food is so dear that the poor can scarcely buy; that cries out for economy and offers daily at the shrine of Bacchus the ransom of a province; that suffers vice to wound and slay its children, narcotising its conscience the while; that in God's terrible day empties its churches and crowds its music-halls; that sacrifices its children to the Moloch of its pleasure, or to the greed of its property exploiters; that suffers its people to be massed in slums until the body politic becomes a gangrene—for such a people the last stage, where no return is possible, cannot be far removed.

* * *

THE RIGHT TO BE WELL BORN

By W. E. D. STOKES, *President of the Patchen-Wilkes Stock Farm, Lexington, Ky.*

THE care and vigilance of the stock breeder in the improvement of animal stock is often cited as a contrast to the carelessness of man about the quality of his descendants. Now the stock breeder enters the discussion by submitting for the benefit of eugenics the knowledge and methods by which animal stock is being constantly improved.

The main principles are few, but highly important:

Only a few individuals (males) are fit for breeding improved strains. Defectives, like unfit animals, should be sterilized.

The microscope plays an important part in determining the fitness of sires.

The crossing of widely separated races results in much inferiority.

A highly developed strain may sometimes be reinvigorated by an "outcross" with a selected "commoner" stock, but any general mating between superior and inferior races is at the expense of the higher.

The admission of low types of immigrants to our country and to the privilege of contributing to the blood of the future American race the author believes is an utterly neglected menace to the future quality of our population.

Human pedigrees similar to those kept for animal breeding are essential to the improvement of human stock. Instead of maintaining strict secrecy concerning family taints and ailments, physicians should be required to record them in public record halls where they may be read by young persons contemplating marriage. If this were done it would furnish to the deserving a justifiable pride in an honorable lineage, and would tend to act as a deterrent from dishonorable acts that would be certain to be recorded as blemishes in the individual or family pedigree.

Social evils and unhygienic customs are adding to the deteriorating effects of bad breeding.

"The germ cells injured by alcohol do not develop into normal beings; they are found defective and deformed in animals and in humans," says this scientific stock breeder.

"Alcohol stands today in America as the greatest barrier to man's continued evolution.

"If there were an organization of young married people pledged to destroy half their children, the world would be shocked. All legal machinery would be called upon to prevent it. Yet it would be less cruel to dispose of children at birth than to allow the indiscriminate use of liquor by men and women who are to become parents. The time ought to be at hand when the consumer of alcohol should be quarantined, as a smallpox victim is segregated. Smallpox cannot produce imbeciles, neuropathic, deformed children; but alcohol can and will."

* * *

THE SLAVERY OF PROSTITUTION

By MAUDE E. MINER. *New York: MacMillan Company. \$1.50.*

YEARS of probation work in connection with New York's Night Court, and research, coupled with the human insight and sympathy that win confidence, have given Miss Miner not only information as to the social and individual problems of prostitution, but a wise intuition for interpreting them constructively. Legislative and reform measures and opportunities are described. Naturally, much emphasis is laid on prevention.

"Wise laws, vigorously enforced, can prevent the exploitation of girls by procurers, and thus lessen the volume of vice. By far-reaching social action, education and religion, we can cut off other sources of supply and turn impulses that create demand into channels where they will make for happy homes and a stronger, finer race. Only by checking both supply and demand will young women ultimately be saved from the deadly stream of prostitution."

Better homes, fewer homes broken up, suitable public supervision of girls and boys when the homes are inadequate, prevention of overcrowding and home industrial work, aid to parents in meeting difficult problems with their children; better housing for girls away from home; improvement, supervision and adjustment of employment for girls, better wages and training to economic efficiency; opportunity for safe and healthful recreation; special provision for the feeble-minded and incorrigible girls—all these are discussed as necessary to freeing womanhood from the worst of slaveries. Above all the author emphasizes the "need of moral training which strengthens the characters of boys and girls and lays foundations for noble living.

"The power to choose well is developed in children by having had the gift of choice. A sense of freedom and ability to express themselves comes through democracy in government at home and at school. A conception of justice based on fairness in discipline and control. Understanding of duty is the result of appeal to their moral natures. Ideals of truth, courage, honesty, sincerity, self-sacrifice, and self-control come by admiration and emulation of these qualities in others.

"Fortunate are those who by the sincerity, nobility, sweetness, faith, and high ideals of parents or teachers, catch a vision of what their own lives may be.

"As no life can attain its fullest development without recognition of the spiritual, the religious element is essential in the growth of character. Nothing else has such power to subdue rebellious impulses, to turn imagination into productive channels, to fill life with splendid interests, and give to it deep meaning. Nothing else reaches beyond the physical and the intellectual to the very soul, and gives the highest ideals of service and love. If we are to have stronger characters, higher standards, and more complete fulfillment of individual lives, we must all have a deeper spiritual sense and a more vitalizing religion. We must let go the sensual, the material, the temporal; we must lay hold on the ideal, the spiritual, the eternal. Then, and not until then, shall we see the great impulses which now contribute to vice, transformed into a creative force that will enrich the human race.

"If we would strengthen the religious power in the lives of young girls and boys, we must deepen it within ourselves. A new call comes to us bidding us to enthrone the spiritual

as the supreme motive of character and the greatest power in realizing for each individual the highest purpose."

As usual, drink, especially in connection with recreation, plays its tragic part in this spoliation of girlhood.

"Dangerous forms of recreation and lack of wholesome recreation are factors in the moral breakdown of women.

"Recognition of large earnings to be gained through combining the sale of liquor with recreation has caused the dance-hall to sell intoxicating drinks and the saloon to provide back rooms for dancing. The bright lights and gay music of dance-hall and café, and the continuous excitement offered by moving picture shows, cheap theaters, and summer amusement parks, attract the young girls to them. For a few brief moments they forget the grind of the work, the worry and sordidness of home, or the loneliness of a cold furnished room, and give way to a spirit of recklessness. Excited by the sense of pleasure or by drinks, they become unthinking, careless and reckless.

"Many girls have entered prostitution by way of dangerous dance halls. There they have indulged in immoral dances and intoxicating drinks, and have associated with prostitutes, procurers, and gunmen.

"For the purpose of increasing the sale of drinks, halls are kept hot and poorly ventilated, dances are short, and intermissions long. The girl is ridiculed by her companions when she insists on taking soft drinks, and soon, to keep up with the rest, she is indulging freely in intoxicating liquors.

"The sale of liquor in dance-halls and dancing in drinking places should be prohibited. This is absolutely necessary. Breaking the vicious associations between drinking and dancing will remove one of the gravest moral dangers for young girls who seek relaxation and diversion in the café or the public dance-hall."

* * *

ANNUAIRE ANTIALCOOLIQUE

By R. HERCOT and O. KLEIBER, *Lausanne, Switzerland: Bureau International contre Alcoolisme. 30 cents.*

THIS eighth annual handbook of international progress against alcoholism contains a summary of anti-alcohol agitation and activities in many countries in 1916; articles on Prohibition in Russia and the United States; rather complete information as to conditions and temperance organizations in Switzerland. It contains, as usual, tables of per capita consumption of alcohol in over 20 countries for the years 1906-1910 as compiled by Gabrielssohn, the Swedish statistician, lists of temperance periodicals and of international organizations. The handbook is printed in French.

* * *

ANTI-SALOON LEAGUE YEAR BOOK, 1917

By ERNEST H. CHERRINGTON. *Westerville, Ohio: American Issue Publishing Co. Paper, 50 cents; cloth, 75 cents.*

IF all the people who will spend this year 50 cents' worth of paper, postage, ink, time, and telephone tolls, asking other people about the latest facts on the alcohol question, would provide themselves with the Anti-Saloon League Year Book for 1917, there would be a great saving all around. Here will be found comprehensively but compactly given the present status of the important features of the problem: legislation, judicial decisions, the attitude of representatives in Congress, statistics of production and consumption, maps of wet and dry territory by states and counties, important state records as to social conditions affected by drink. In this connection one will find useful for checking up the comparisons which the trade likes to make between dry and wet states, the tables giving the percentage of the state populations living in wet and dry territory.

The section on the present status of the problem in all the countries of the world is of special importance to all leaders of thought who would find here an easy way of keeping up to date by simply extending the margins and inserting subsequent news.

The section on scientific facts, which covers the findings of the past year, could be similarly extended and revised by each owner of the book.

Friends of temperance should see that no library shelf of year books lacks this one on what is now generally considered one of the leading, if not the leading social problem. All school libraries should not only have it, but teachers and pupils should learn to look to it for the information they frequently ask of others, particularly in the essay work of advanced students. A classified bibliography and full index add to the value of the book.

* * *

CYCLOPEDIA OF TEMPERANCE, PROHIBITION AND PUBLIC MORALS

By DEETS PICKET, CLARENCE TRUE WILSON, and ERNEST DAILEY SMITH. *New York and Cincinnati: Methodist Book Concern.*

THE POCKET CYCLOPEDIA OF TEMPERANCE, first published three years ago by the Board of Temperance of the Methodist Church, has quite outgrown the "pocket." Arranged and compiled quite differently from the Anti-Saloon League Year Book, it is equally useful in its own field as a very handy volume for quick reference. The alphabetical arrangement for topic heads makes consultation easy, and the subject matter is broadly chosen and well told. A second and enlarged edition soon followed the first and now the new and much enlarged edition is brought out under the title of "The Cyclopedia of Temperance, Prohibition and Public Morals." Cross references under many of the topics and an extended index are further additions to the usefulness of the volume.

* * *

CLEARING THE WAY, A FIRST BOOK ON SANITATION, AND KEEPING THE LAWS, A FIRST BOOK ON PHYSIOLOGY

By JOHN W. RITCHIE. *Yonkers, N. Y.: World Book Company.*

KNOWLEDGE of the diseases caused by germs is steadily developing and a better understanding of them by the people is essential to the full co-operation of all classes in measures of protection from germ diseases.

In the small book, "Clearing the Way," Professor Ritchie has set forth in clear, simple, easily comprehended language the rules and principles involved in opposing the infinitely small causes of sickness and death.

Recognizing that an understanding of the various reasons for the laws of health has a strong influence upon willingness to obey them, the author has stated in "Keeping the Laws" the facts concerning the parts and processes of the bodily machine that are their own best argument for observing them.

One advance over the older books is a section in harmony with the growing conviction that knowledge of the origin of individuals must be furnished earlier in life and in pure scientific form. "How the Young Plant Starts From a Cell Called the Egg," "The Egg Fertilized by the Pollen," "The Growth of the Egg Into a New Plant," and "The Growth of the Human Body From a Single Cell," furnish a starting point for the knowledge that is to take the place of morbid curiosity.

The teaching concerning the effects of alcohol upon the life and health of living beings is illustrated in the passage:

"When alcohol is used day after day, and even though it be used very moderately, there is a piling up of its effects on the tissues. Indeed, the cells of a man who drinks a moderate amount of beer or wine daily are never free from the use of alcohol. Beer drinkers suffer most of all from fatty degeneration of the tissues, and one need never become intoxicated to experience the evil effects from alcohol that have been described."

*THE PHYSICAL EFFECTS OF SMOKING

By GEORGE J. FISHER, M. D., and ELMER BERRY, B. S. *New York: Association Press.*

THE too scant literature of experimental studies of the effect of tobacco is enriched by this report of tests carried on at the International Young Men's Christian Association College, Springfield, Mass., under the joint direction of Dr. Fisher, who is senior secretary of the Physical Department of the International Y. M. C. A. Committee, and Mr. Berry, Professor of Physiology at the International Y. M. C. A. College.

The authors do not claim that these experiments are finally conclusive proof, but believe that the consistent results obtained in each of the four tests with an exceptional group of men in more than the average physical condition do indicate that smoking no more than one cigar affects the heart rate, delays its return to normal, and affects the control of the neuro-muscular system, as shown by the impairment of accuracy in baseball pitching.

Professor Irving Fisher of Yale University in his introduction to the book comments that the results of the tests "would seem to indicate that smoking is more injurious than we have suspected. It will give pause to those who smoke or contemplate smoking if they value their physical and mental alertness." (See also page 258.)

PAMPHLETS

Those starred () are of special interest on the alcohol and related questions.*

*ALCOHOL AS REVEALED BY MODERN SCIENTIFIC RESEARCH. By S. CALVIN SMITH, M. D., *Jefferson Medical College, Philadelphia. Reprinted from Pennsylvania Medical Journal, August, 1917.*

A summary from the physicians' standpoint of present-day knowledge of the nature and effects of alcohol. Emphasis is laid upon the improvement in experimental mechanics and methods that makes exact knowledge possible in contrast to what was formerly a matter of opinion, also, upon the precedent for change in the matter of the use of alcohol which is found in the abandonment of other old forms of treatment. The author summarizes his conclusions from a wide range of practical and experimental work reviewed as follows:

1. The therapeutic employment of alcohol by physicians is based on traditions alone, which traditions misinterpreted certain physiological reactions; these reactions were not properly understood for the reason that our predecessors had no instruments of clinical precision available for investigations and no modern laboratory facilities at hand.
2. Alcohol is not a food: it is a narcotic poison of such diversified physiological action on the various structures of the human body that its employment is unwarranted, unscientific and unsafe.
3. In the light of recent studies, alcohol possesses no physiological action which cannot be more promptly and more safely secured by a proper selection of legitimate drugs.
4. No rational basis exists for the employment of alcohol in medicine.

*ARMY EXPERIENCES WITH DRINK. By E. L. TRANSEAU, *Scientific Temperance Federation. Westerville, Ohio: American Issue Publishing Company. 10 cents.*

*FRANCE AND ALCOHOLISM IN WAR-TIME. By JEAN FINOT. *Translation by CORA FRANCES STODDARD. Westerville, Ohio: American Issue Publishing Company. 10 cents.*

*DEFEAT OR VICTORY? By ARTHUR MEE. *Westerville, Ohio: American Issue Publishing Company. 25 cents.*

*THE FIDDLERS. By ARTHUR MEE. *Westerville, Ohio: American Issue Publishing Company. 15 cents.*

These four war pamphlets are indispensable to everyone who would know and would speak intelligently on the military and national problems complicated by alcohol.

"Army Experiences With Drink" brings together not only actual army experiences of several nations, but the scientific facts and experiments that have a bearing on military

efficiency and health. Everyone having anything to do with the instruction of young people and especially of young men entering the army, should possess this material.

The other three pamphlets are the work of journalists in France and Great Britain who write out of what they themselves have seen and ascertained by careful inquiry as to the losses inflicted by drink during the war upon these two great nations.

Jean Finot, from whose book the pages comprising "France and Alcoholism in War Time," are translated, is the eminent editor of *La Revue* and a frequent contributor to *Le Temps*. His book as published has been censored so that what remains may fairly be accepted as a correct though incomplete story of the enormous losses that alcoholism has been inflicting in France while she is battling for life.

The two books by Arthur Mee, an English journalist, are like swords and flames of truth in their relentless exposure of the fearful handicap drink has been to Great Britain during the war and their criticism of inaction which has produced no radical measures for minimizing the evil. *The Fiddlers* is the later of the two books, though both have appeared this year, and is made up largely of actual extracts from newspaper and official accounts of the terrible losses of various kinds due to drink.

All these pamphlets have been published within a few months and deserve wide and careful reading.

SUMMARY OF CHILD WELFARE LAWS PASSED IN 1916. *Publication No. 21. Children's Bureau, U. S. Department of Labor.*

ILLEGITIMACY IN EUROPE AS AFFECTED BY THE WAR. By EMMA O. LUNDBERG. *No. 106, National Conference Social Work, 315 Plymouth Court, Chicago, Ill.*

*A SOCIAL STUDY OF MENTAL DEFECTIVES IN NEWCASTLE COUNTY, DELAWARE. By EMMA O. LUNDBERG. *Publication No. 24, Children's Bureau, U. S. Department of Labor.*

INFANT MORTALITY IN MANCHESTER, N. H. By BEATRICE S. DUNCAN and EMMA DUKE. *Publication No. 20, Children's Bureau, U. S. Department of Labor.*

England's slogan "Child Welfare as Usual" during the war finds expression in all nations as they realize the importance of conserving child life in view of the awful waste of life involved in the war.

War conditions involved at once a struggle in the United States to conserve the child labor laws since with the scarcity of labor there was immediate temptation to break down such safeguards as had already been placed by law around the labor by children.

As its title indicates, Publication No. 21 of the Children's Bureau summarized new provisions supplementing or superseding previous laws touching the relation of parent and child, offenses against the child, health, sanitation and recreation, child labor, school attendance, defectiveness, delinquency, and dependency and neglect, physical and military training.

The report on illegitimacy in Europe during the war given at the 1917 National Conference on Social Work by Miss Lundberg, indicates that while reliable data are very incomplete, such figures as are available show that both legitimate and illegitimate births have decreased since the war, the decrease in the latter being somewhat less so that the relative proportion of illegitimate to legitimate births is somewhat higher.

The pamphlet reports measures taken by the various governments during the war in behalf of the illegitimate child.

Hope is expressed that precautionary measures now being taken in the United States in providing adequate recreation and opportunities for social life among the mobilized troops will prevent an increase in this country in the rate of illegitimacy which where obtainable has always been considerably lower than in most of the European countries.

The relation between illegitimacy and low mentality appears in the study of mental defectives in New Castle county, Dela., also reported by Miss Lundberg. Two hundred and twelve positive cases of mental defect were studied. Seven mental defectives were mothers of 14 illegitimate children. Two of these mothers were only 17 years of age. Twenty defectives were themselves illegitimate. The condition is evidence of the fact that feeble-minded illegitimate children are in particular need of public protection and supervision.

As usual, alcoholism was found mixed with defective conditions. In the case of seven of the 39 white defectives belonging in families of very low income the fathers were alcoholic; in two of these families the mothers were subnormal. The members of one family in which this combination was found were professional beggars. One mentally defective woman, herself illegitimate, was mother of four children all slow and incapable, the father an alcoholic. A mentally defective colored woman was living with her common-law husband who was a heavy drinker, father of one of her two children.

More than one-third of the cases of mental defectives studied were living under adverse or degrading home conditions including alcoholism. Institutional care and proper supervision for those suitable for community life is necessary for the welfare of the defective and for reducing the social burden of delinquency and degeneracy.

In the new study of infant mortality in Manchester, N. H., conducted under the direction of the U. S. Children's Bureau, one looks in vain, as in preceding studies of other cities, for any discussion of the relation of drink to the infant death-rate. Nearly every other conceivable possible factor is investigated and analyzed.

*THE CIGARET PROBLEM. By WILLIAM A. MCKEEVER. *Department of Child Welfare, University of Kansas, Lawrence, Kansas.*

With characteristic energy and thoroughness, Kansas has set itself to ridding its boys of the cigaret evil. A law enacted by the Legislature of 1917 makes it unlawful to sell, barter or give away any cigarets or cigaret papers, to have them in one's possession for any of these purposes, to advertise them to sell or give cigars, cigarets, cigaret papers or tobacco to a minor, or to allow a minor to frequent any place of business while using tobacco in any form.

The pamphlet by Dr. McKeever summarizes the damage done to youth by the cigaret, suggests measures for making the cigaret unpopular. Other publications recommend constructive plans for developing boys' interests and activities in other directions.

NEW PERIODICALS

The International Record. Guy Hayler, Editor. 4 Avenue Road, South Norwood, London S. E. 25, England.

An eight-page quarterly; summary of news on the alcohol question from all parts of the world.

The Welfare Orator. Dr. W. F. Crafts, Editor. 206 Pennsylvania Avenue, S. E., Washington, D. C. \$1.00 per year.

The first number announces that this little magazine will publish addresses on the alcohol and other social problems in a form useful for other speakers, reference or suitable for reading as they are in public. The first number contains addresses by Dr. W. F. Crafts on "A Re-discovered Hemisphere;" Hon. Wm. J. Bryan, "Maintaining Civilization in the Camps;" Rev. George Zurcher, "The Catholic Mind on Prohibition;" Dr. Clarence T. Wilson, "Why No Compensation," and extracts from others.

The Pilgrim Magazine. Congregational Sunday School and Publishing Society, Boston. 75 cents per year.

Continues in enlarged and improved form *The Pilgrim Teacher*, planned especially for giving help in the upper grades of the Bible School and discussing problems of the whole school. One page devoted to "the great issues of the day, designed to help teachers bring to their classes the best thought on current moral questions, presents in the first number national Prohibition and social hygiene as necessary war measures."

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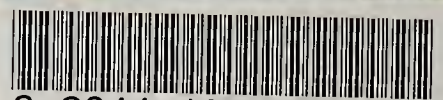
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